



IEEE Sensors Council



CALL FOR PAPERS

IEEE Sensors Journal Special issue on

Sensors and Interfaces for Mobile Healthcare

During the last few years, there has been a significant increase in the number and variety of wearable health monitoring devices, ranging from simple pulse monitors, activity monitors, and portable complete systems for monitoring human activity. Crucial for the progress in developing wearable health monitoring systems are the emerging wireless body area networks (WBANs,) comprising multiple sensor nodes, each capable of sampling, processing, and communicating one or more vital signs (heart rate, blood pressure, oxygen saturation, activity) or environmental parameters (location, temperature, humidity, light). Typically, these sensor nodes are placed strategically on the human body as tiny patches or in the users' clothes allowing ubiquitous health monitoring for extended periods. A number of recent research efforts focus on wearable or advances implantable systems (both sensors and interfaces integrated on a single die or in a multichip module) for health monitoring. This Special Issue invites high-quality research articles on sensors and interfaces for remote monitoring of biological parameters (e.g. derived from EEG, ECG, EMG, etc.). Original papers, as well as reviews and tutorials, will articulate new perspectives, highlights, open issues, and research challenges in this dynamic area.

Papers are solicited in, but are not limited to, the following and related topics:

- Sensor networks in biomedical, bio telemetrical and environmental applications
- Novel healthcare sensor systems and applications
- New sensor materials and technologies for bio and medical applications
- Printed, flexible, biodegradable and biocompatible electronics
- Sensors and technologies for ambient assisted living
- Wearable sensors for biomedical applications
- Remote sensing systems for healthcare
- Novel testing and modeling techniques for sensor systems in healthcare
- Neuro-inspired electronics and neural system architectures for brain activity monitoring
- Predictive study of neural signals related to subjects' activity
- Brain-computer interface software tools and architectures,
- Formal neural-network models in healthcare monitoring
- Real time/post processing of bio signals: tools, methods and experimental results
- Hardware design and signal processing techniques for noise and artefacts rejection in bio signals

Solicited and invited papers shall undergo the standard IEEE Sensors Journal peer review process. All manuscripts must be submitted on-line, via the *IEEE Manuscript Central*[™], see <http://mc.manuscriptcentral.com/sensors>. When submitting, please indicate in the "Manuscript Type" roll-down menu, and also by e-mail to Ms. Amy DiMaria, a.dimaria@ieee.org, that the paper is intended for the "Sensors and Interfaces for Digital Health Special Issue. Authors are particularly encouraged to **suggest names of qualified potential reviewers** for their manuscripts in the space provided for these recommendations in *Manuscript Central*. For manuscript preparation and submission, please follow the guidelines in the *Information for Authors* link from the IEEE Sensors Journal web page, <http://www.ieee-sensors.org/journals>

Deadlines:

Manuscript Submission:	November 15, 2015
Notification of Acceptance:	January 30, 2016
Final Manuscript published in IEEEExplore:	March 30, 2016
Tentative date of paper issue:	May 30 2016

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