

IET *Wireless Sensor Systems* Call for Papers

SPECIAL ISSUE ON: Body Sensor Networks

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As researchers from both academia and industry strive towards the goals of improving patients' quality of life and reducing health costs, Body Sensor Networks (BSNs) is a very promising research area that can help achieve both goals. If properly deployed, BSNs can continuously gather physiological data from the human body and use it for healthcare monitoring, including patient self-assessment, remote diagnosis and chronic disease management. The importance of BSNs towards the goal of ubiquitous monitoring of health anywhere and anytime is even greater when taking into account their possible utilization for augmented sensory stimulation for people with hearing and visual impairments, as well as for improved support of the aging population, worldwide. In parallel, BSNs offer a range of opportunities when applied in the sports and cyber-physical security domains.

However, a number of issues related to the efficiency of BSNs are yet to be sufficiently addressed. Sensors are placed on the human body or clothes, and hence the network has to face constantly changing wireless channel characteristics with the movement of the body. Issues such as interference, energy consumption, security of the transmitted information, as well as the limited resources of the wireless medium when multiple devices try to transmit, are all open and challenging research problems to address. Coupled with the development of new applications that will further enhance the value of BSNs, they compose distinct research challenges from a networking, communications as well as a system-oriented viewpoint.

This Special Issue is devoted to covering all aspects of theoretical research and practical implementations of body sensor networks (BSNs) and aims to provide a forum for researchers and practitioners to present and discuss their most recent contributions in the field.

Topics covered include:

- Novel BSN applications
- Energy-efficiency for BSNs
- Quality of service and quality of experience for BSNs
- Security and privacy for BSNs
- BSN system architecture
- Interference mitigation in BSNs
- Systems enabling patient self-monitoring and assessment
- Hardware for BSNs
- PHY, MAC and Network Layer Protocols for BSNs
- BSNs with cloud computing capabilities
- BSNs for eHealth and activity monitoring/biomechanics
- BSNs and wearables
- Data quality for wearables
- BSNs and the Internet of Things

All papers must be submitted through the journal's Manuscript Central system:
<http://mc.manuscriptcentral.com/iet-wss>

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