

IEEE Journal on Selected Areas in Communications
Call for Papers
Body Area Networking: Technology and Applications

Recently, there has been a growing interest in the field of wireless body area networking (BAN) for pervasive healthcare and entertainment applications due to the surge in the number of personal devices around the body, new sensing and monitoring devices for in-body and near-body use, device miniaturization, and the advancements made in energy-efficient wireless and sensor networks. In comparison to traditional wireless sensor and ad hoc networks, BANs present several additional and new research challenges due to signal propagation characteristics of in and around a human body and need for safe, secure, and dependable operation with ability to operate for long duration.

The goal of this issue is to bring together the state-of-the-art research contributions not currently under review by any other journal/magazine/conference that describe original, completed and unpublished work addressing various aspects of wireless BAN. Topics of interest include, but are not limited to:

- Energy-efficient, secure, privacy-preserving BAN protocols and algorithms
- Coexistence and interference mitigation
- QoS provision and differentiation, security and fault tolerance issues in BAN
- Protocols and algorithms for the PHY, MAC and Network layer
- Data aggregation and fusion algorithms for in-network information processing
- Integration of BAN with heterogeneous networks
- Antenna design and channel models for in- and on-body signal propagation
- Platforms for the support of BAN applications
- Near field communication (e.g., capacitive, electromagnetic, and inductive) and implantable systems
- Simulation, analytical modeling and measurements of BAN
- Design (QoS, energy, security) requirements of existing and emerging BAN applications

Original, unpublished contributions and invited articles will be considered for the issue. The papers should be formatted according to IEEE-JSAC guidelines (<http://www.jsac.ucsd.edu/submit.html>). Authors should submit their complete manuscript via COCUS (<http://cocus.create-net.it/cocus/>) according to the following timetable:

Manuscript Submission:	January 15, 2008
Acceptance Notification:	June 15, 2008
Final Manuscript due to Pub:	September 1, 2008
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