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PHYCOM: Physical Communication Journal
Special Issue on:
Signal Processing and Coding for Advanced Communication Systems

To meet rapidly growing demands for various telecommunication services such as high speed internet, wireless multimedia, and mobile computing, substantial research efforts have been made on the development of advanced communication systems. One of the major goals in such a development is to design efficient signal processing and coding schemes to achieve highly reliable and spectral-efficient transmissions at relatively low cost and power consumption, which brings numerous new challenges for signal processing related designs such as equalization, detection, and synchronization, as well as coding related issues such as adaptive modulation and coding, low complexity decoding, and practical code design.

The aim of this special issue is to bring together state-of-the-art research contributions and practical implementation that advance design of communication systems using signal processing and coding techniques. Original contributions in all areas related to signal processing and coding for advanced communication systems are solicited for this special issue. Topics of interest include, but are not limited to:

- Adaptive Modulation and Coding, Hybrid ARQ
- Capacity Approaching Codes for Cognitive Radio, Cooperative Communications, MIMO
- Cognitive Radio, 60GHz Systems
- Equalization and Detection
- Interference Mitigation
- Low Complexity Decoding
- MIMO Transceiver Designs
- Multi Carrier Communication
- Network Coding
- Rateless Coding
- Synchronization
- Space Time Coding and Processing
- Turbo, LDPC Codes, and Practical Code Design

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