

Call for Papers

IEEE Journal on Selected Areas in Communications: Cognitive Radio Series

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Since its inception in 1999, cognitive radio (CR) has been considered a promising means for realizing dynamic spectrum access and thereby addressing the spectrum scarcity problem encountered in many countries. The field has since produced various cognitive functionalities in radio design, as a result of inter-disciplinary efforts from many research communities. Meanwhile, many standardization activities, such as IEEE 802.22, ECMA 392, IEEE SCC41, and IEEE 802.11af, have contributed to realizing cognitive radio's potential for commercial use. Besides, there have been worldwide efforts from agencies such as FCC and Ofcom to remove regulatory barriers to future deployment of CR networks.

To address this large and rapidly growing interest, the IEEE Communications Society is launching a new series on cognitive radio, to be published under the banner of the IEEE Journal on Selected Areas in Communications (JSAC). Starting in 2012, the regular issues of JSAC will be supplemented each year by one or more issues dedicated to cognitive radio. The series will serve as a platform for communicating state-of-the-art CR research, highlighting the research challenges that remain unanswered and further exploring innovative solutions for resolving them. Accordingly, we invite the submission of high-quality manuscripts in the relevant sub-topics of cognitive radio, papers which have not been published previously and are not currently under review by any journal. The general scope of this series includes, but is not limited to, the following:

- Information-theoretic aspects of cognitive radios
- Spectrum sensing techniques for cognitive radios
- Physical (PHY) layer design of cognitive radios
- Medium access control (MAC) design for cognitive radio networks
- Routing, spectrum mobility, and dynamic resource management
- Cross-layer optimization for cognitive radio networks
- Cooperative techniques and energy-efficiency design of cognitive radio networks
- Security issues in cognitive radio networks
- Artificial intelligence and machine learning for cognitive radios
- Spectrum sharing and dynamic spectrum access
- Spectrum pricing, economics models and game theory for dynamic spectrum access
- Emerging applications of cognitive radio networks (femto cells, heterogeneous networks, ...)

Prospective authors should prepare their submissions in accordance with the rules specified in the 'Information for Authors' section of the JSAC guidelines (<http://www.jsac.ucsd.edu/Guidelines/info.html>).

All manuscripts should be prepared in single-column double-spaced format, and submitted in PDF form to EDAS: www.edas.info.

Papers submitted for possible publication in March 2013 and November 2013 issues should follow the following timetable.

Manuscript submission	April 15 2012	November 1 2012
First review results	August 1 2012	March 1 2013
Second review results	October 20 2012	June 1 2013
Materials to publisher	November 15 2012	July 1 2013
Publication	March 2013	November 2013