عنوان مقاله:

Outage Constrained Multi-hope Spectrum Sharing System with Co-Channel Interference

محل انتشار:

دومین کنفرانس بین المللی مهندسی دانش بنیان و نوآوری (سال: 1394)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

in this paper, we study power consumption in a multi-hop spectrum sharing system (MHSSS) with the presence of co-channel interference and under constraint of the outage probability (OP). Considering imperfect channel state (CSI) information, we investigate power consumption and propose an algorithm which jointly performs relay selection and power allocation. Convex optimization framework is used to minimize power consumption of the secondary system and determine powers for the relays. Furthermore, we derive an upper band and a lower band for the optimal transmit power. Numerical simulations are made and results verify theoretical analysis and demonstrate power efficiency of the proposed algorithm

کلمات کلیدی:

multi-hope; spectrum sharing; co-channel interference; power allocation; outage probability