

عنوان مقاله:

Joint Antenna Selection and Adaptive Modulation in MIMO Systems in the Presence of CSI Imperfection

محل انتشار:

مجله بین المللی ارتباطات و فناوری اطلاعات، دوره 3، شماره 3 (سال: 1390)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Mahshad Hamedanian

Abbas Mohammadi

Abdolali Abdipour

خلاصه مقاله:

This paper presents a strategy to combine the antenna selection technique and the adaptive modulation method for multiple input multiple output (MIMO) systems. The MIMO architecture significantly improves the performance of wireless systems at the expense of a radio frequency (RF) hardware complexity. However, the advantages of MIMO systems can be mainly maintained with simple hardware using antenna selection technique. Moreover, in order to improve the efficiency, the adaptive modulation method can be implemented. As a practical system design limitation, the perfect channel state information (CSI) may not be achievable. Accordingly, the effect of imperfect channel state information (ICSI) in the proposed systems has been investigated.

کلمات کلیدی:

MIMO, antenna selection, adaptive modulation, CSI imperfection, spectral efficiency, bit error rate

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1426569>

