Abstract

In this paper, the performance of an uncoded Single Input Multiple Output (SIMO) scheme is analyzed under Rayleigh fading channel using Maximum Ratio Combining (MRC) and Equal Gain Combining (EGC) methods. The analysis of these combining methods is done on the basis of two major factors, Signal to Noise Ratio (SNR) and Bit Error Rate (BER) performance using QAM and PSK modulation techniques. With increase in number of antenna on receiver side, SNR gets maximized and BER gets minimized. It is analyzed that MRC with QAM modulation has shown better evaluation results than EGC.

References

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Index Terms

Computer Science

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Keywords

Rayleigh fading, Bit Error Rate (BER), Maximum Ratio Combining (MRC), Equal Gain Combining (EGC), Single-Input-Multiple-Output (SIMO), MIMO systems.