Abstract

This paper presents the generalized frequency division multiplexing a GFDM system with MIMO system which is much more diverse application requirements. The 5G physical layer will support applications with different requirements, such as high data rate, ultra low power consumption and low latency. Recently, there is significant interest in the design and performance of new waveforms for 5G. One of the most important candidates is the Generalized Frequency Division Multiplexing (GFDM) waveform. Multiple-input multiple-output (MIMO)-friendliness is a key ability for a physical layer scheme to satisfactorily match the requirements of future. MIMO-GFDM schemes are provided through the proposed framework and their bit error ratio performances, computational complexities, and spectral efficiencies are analyzed. It has been demonstrated that the Intersymbol interference and noise will be reduce with the better performance.

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Keywords

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