

Abstract

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A Novel Semi-Blind ed Mapping Technique for PAPR Reduction in OFDM

In this letter, a novel semi-blind ed mapping (SLM) technique is proposed for peak-to-average power ratio (PAPR) reduction in orthogonal frequency-division multiplexing (OFDM) system. No explicit side information is sent instead the ed signal index is embedded in transmitted data. The proposed SLM technique maintains the same PAPR as classical SLM technique, while increases the overall throughput. Simulations results of several OFDM systems employing the proposed semi-blind SLM technique using either QPSK 16-QAM modulation show that it performs very well in both the SI index detection error rate and bit error rate (BER).