

Research on OFDM technique in coherent optical communication systems

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Abstract: This topic aims to analyze and evaluate the performance of Orthogonal Frequency Division Multiplexing (OFDM) technology in optical communication systems, meeting the current high demand for data transmission speed. Through a combination of theoretical research and experimental implementation, the topic proposes optimization solutions for OFDM in optical environments, contributing to enhancing the practical applicability of this technology. Expected results will identify challenges and opportunities when using OFDM in coherent optical communication systems, while opening new development directions for research on optical data transmission.

Keywords: OFDM, optical communication, technology optimization