

於具相關性小尺度衰落通道中應用LCR與AFD分析研究雙分支MRC與SC分集之接收方法

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摘要

本論文提出於具相關性小尺度衰落通道中，應用平均準位跨越率(level crossing rate, LCR)及平均衰落區間(average fading duration, AFD)分析研究雙分支最大比例合成(maximal ratio combining, MRC)與選擇性合成(selection combining, SC)分集之接收方法，並假設其操作於Nakagami-m的統計分布之衰落通道環境下，就分支間的獨立性以及具相關性為實例加以討論。除了以理論推導到最新的方程式以外，並將其為依據經由數值分析所得之結果，再以特例的正確性加以比對，證明出最後的結果，並將數值分析針對所推導出的效能結果作交叉比較。

關鍵詞：最大比例合成分集系統，選擇性合成系統，平均準位跨越率，平均衰落區間，關聯Nakagami-m通道

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