

Research on massive MIMO system applied in 5G networks

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Abstract: This topic aims to research and deploy a massive Multi-Input Multi-Output (MIMO) system to enhance data transmission performance in fifth-generation (5G) mobile networks. The context arises from the practical need to improve service quality and optimize network resources. The objective of the research is to build and test a massive MIMO solution based on transmission optimization algorithms. The research methodology includes theoretical analysis, experimental model design, and practical application deployment on a 5G platform. The expected outcome of the topic is to provide new scientific knowledge about massive MIMO and contribute to the development of 5G technology.

Keywords: massive MIMO, 5G network, data transmission, optimization, practical application