

Performance analysis of massive MIMO for 5G wireless communication systems(Conference Paper)

- Islam, M.S.,
- Kamruzzaman, M.,
- Jessy, T.,
- Zahan, M.S.,
- Hassan, M.S.
- ^aDepartment of Electrical and Electronic Engineering, Uttara University, Dhaka, Bangladesh
- ^bDepartment of Electrical and Electronic Engineering, American International University Bangladesh (AIUB), Dhaka, Bangladesh

Abstract

In the present age, wireless communication system has achieved a huge achievement in both efficiency and cost effectiveness. High data rate is no more a dream in present situation and this rate is increasing quite rapidly in recent past. Multiple Input Multiple Output (MIMO) is going to make an evolution in the field of wireless communication. MIMO has the capability to communicate with different antenna at a same time which are 2*2, 3*3, 4*4 etc. and nowadays massive MIMO is the burning issue where hundreds to thousand antenna can communicate simultaneously which can ensure the very high data rate which is required for the 5G communication. Mm wave can play an important role to make this system more effective because the wavelength of Mm wave is very low so in that case frequency is very high which are from 30-300 GHz. Massive MIMO provides a huge channel capacity for the consumer which can definitely insure the high data rate. © 2016 IEEE.

Author keywords

5G Array Antenna MIMO Shannon Capacity

Indexed keywords

Engineering controlled terms: Antenna arraysAntennasChannel capacityCost effectivenessMillimeter wavesWireless systems

Engineering uncontrolled terms Array antennasHigh data rateMm wavesPerformance analysisPresent situationSharmaWireless communication systemWireless communications

Engineering main heading: MIMO systems

- **ISBN:** 978-150901666-2
- **Source Type:** Conference Proceeding
- **Original language:** English
- **DOI:** 10.1109/CCAA.2016.7813976
- **Document Type:** Conference Paper
- **Volume Editors:** Swaroop A.,Singh M.,Astya P.N.,Sharma V.
- **Sponsors:**
- **Publisher:** Institute of Electrical and Electronics Engineers Inc.