Lobamba communication operator base station cooperation

How does a cooperative communication system work?

In a cooperative communication system, the composition of the relay set is adjusted according to certain parameters, and the most appropriate relay nodes are selected for the optimal combination to participate in the collaboration communication, which will obtain a great collaboration gain.

Are NoMa-based cooperative communication systems better than traditional communication systems?

Duan et al. (2018) considered NOMA-based cooperative communication systems and proposed a two-stage overlying transmission scheme whose transport rates and total traversal rates have significant advantagesover time division and multiple access and traditional NOMA schemes.

How does the redundancy technique work in cooperative Noma?

The redundancy technique is applied in cooperative NOMA for increasing transmission reliability and transmission rate. Specifically,users with good channel status act as relays and forward user information with poor channel quality to enhance the reception reliability of users with poor channels (Islam et al.,2016).

What is a single-antenna cooperative communication system?

Diversity Technique. The single-antenna cooperative communication system, as discussed above, is one in which the transmitter, relay node, and receiver all have only a single antenna. The system can only send or receive one signal at a time.

In the future, it can be envisioned that the ubiquitously deployed base stations of the 5G wireless mobile communication infrastructure will actively participate in the context of the smart grid ...

The 5G base station is composed of a power supply system and communication equipment [4], in addition to some auxiliary equipment such as air conditioning and lighting.

The energy consumption of the mobile network is becoming a growing concern for mobile network operators and it is expected to rise further with operational costs and carbon footprints due ...

This paper develops a method to consider the multi-objective cooperative optimization operation of 5G communication base stations and Active Distribution Network (ADN) and constructs ...

First Experimental Scenario For this scenario we set up two base stations (bandwidth of 25 PRBs was configured for base station 1 and 15 PRBs for base station 2) and ten users (see Figure ...

Technicians from China Mobile check a 5G base station in Tongling,Anhui province. [Photo by Guo Shining/For China Daily]China aims to build over 4.5 million 5G base stations next yearand give ...

In this paper, a distributed collaborative optimization approach is proposed for power distribution and communication networks with 5G base stations. Firstly, the model of 5G base ...

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After that, we discuss the core technologies of cooperative communication that includes channel multiplexing, relay selection, power allocation. Followed by that, we discuss the network ...

Abstract This work focuses on a large-scale multi-cell multi-user MI MO system in which L base stations (BSs) of N antennas each communicate with K single-antenna user equipments. We ...

The cooperation between base stations is considered in this paper. If the local base station does not cache the content requested by the local user, other neighboring base stations in the ...

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