

Title: Communication green base station delay is high

Generated on: 2026-03-17 21:51:13

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Can a green base station reduce energy consumption?

Several techniques have been deployed to reduce the energy consumption of the base station in what is called a green base station. This paper presents an insight into these approaches and highlights key challenges and potential research directions.

What is a green base station?

This proliferation of BSs has resulted in consequential increase in energy consumption and Green House Gases (GHGs) emission. Several techniques have been deployed to reduce the energy consumption of the base station in what is called a green base station.

Can dynamic base station reduce energy consumption?

According to Oh et al., it can reduce the energy utilization of wireless cellular networks. Dynamic base station (BS) was explored by developing an energy-saving switching-on/off technique (SWES), with various on/off decisions made. As a result, energy consumption was reduced by 55% during the week and 80% during the weekend.

Are green communication networks a common energy consumption problem?

Vinay et al. present an overview of issues with consumption of energy in green communication networks and describe energy-saving methods. Green communication networks are a common energy consumption problem, and this section describes the methods used to improve their energy efficiency.

To enhance system efficiency and establish green wireless communication systems, this paper investigates base station sleeping and power allocation strategy based on ...

This paper reviews the recent studies conducted on green networking and communication for next-generation networks with adverse effect on the climate. Technological ...

In today's 5G era, the energy efficiency (EE) of cellular base stations is crucial for sustainable communication. Recognizing this, Mobile Network Operators are actively prioritizing EE for ...

In this paper, we take initial steps towards a performance exposure system at the base station using a data-driven approach for predicting performance violations in terms of ...

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We propose eliminating the effect of processing delay by introducing an Always-Connected Enablement BS (ACE-BS). We conduct experiments in an actual local 5G environment with ...

By allowing a larger delay, the operators may reduce base station power consumption, in turn leading to grid energy savings. However, a careful trade-off needs to be made to avoid these ...

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