Bahrain Communications 5G Base Station AI Energy Saving Project

---

The energy consumption of 5G networks is one of the pressing concerns in green communications. Recent research is focused towards energy saving techniques of base stations (BSs).

The electricity cost of communication operators is soaring, so it is imperative to study the energy saving and consumption reduction of 5G base station. For the energy-saving effect of ...

This article first proposes a dynamic base station switching framework based on deep reinforcement learning (DRL), which optimizes the power consumption of switching BSs.

After 5G trial commercial network testing and verification, the power consumption of a single 5G station is 3 to 4 times that of a single 4G station, and operators are ...

This project addresses the critical challenge of energy consumption in 5G networks, specifically in Base Stations (BSs), which account for over 70% of the total energy usage.

This paper introduces the basic energy-saving technology of 5G base station, and puts forward the intelligent energy-saving solutions based on artificial intell

To address this, we propose a novel deep learning model for 5G base station energy consumption estimation based on a real-world dataset. Unlike existing methods, our approach integrates the Base ...

Some energy-saving technologies developed since the fourth generation (4G) era are explained in detail, while artificial intelligence (AI) and big data technology are introduced in response ...

In this paper, a framework is developed to study the impact of different power model assumptions on energy saving in a 5G separation architecture comprising high power Base Stations ...

Web: https://www.foires-salons.eu