

Title: Base station power sleep technology

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An energy consumption optimization strategy of 5G base stations (BSs) considering variable threshold sleep mechanism (ECOS-BS) is proposed, which includes the initial matching ...

A multi-BS cooperation self-optimising sleep strategy for 5G BSs that consists of an initial user association stage based on multi-BS cooperation (MBSC) and a self-optimising ...

In this paper, we propose a practical learning approach to obtain policies for BS sleep control via MARL with data-driven radio environment map (REM) calibration. In this approach, we first train REM ...

SoftBank Corp deployed an artificial intelligence system that dynamically controls base station sleep states across Japan. The technology analyzes real-time traffic patterns and people ...

As the primary source of energy consumption in communication networks, the power usage of 5G base station (BS) is a significant concern. The sleep mode (SM) of BS can be utilized to reduce mobile ...

These technologies involve strategies for dynamically adjusting the operational status of base stations, such as activating sleep modes during periods of low demand, to optimize energy use ...

To reduce average power consumption and save power in 5G, we have modelled the 5G BSs sleeping mechanism as an M/G/1 queue with two types of vacations (two different sleep modes), ...

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

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