Problems with green base station planning

In this paper, we present DensQuer, which builds extremely energy efficient connectivity for any given geographical region, and enables greener energy-footprint base-station and longer ...

This paper presents the problem of efficient optimal sizing and planning of green cellular networks formulated as a multiobjective optimization with conflicting cellular operators and user interests.

These results demonstrate not only technical advantages but also practical value in supporting cost-effective and low-carbon urban infrastructure planning.

This paper proposes two models for enhancing QoS through efficient and sustainable resource allocation and optimization of base stations. The first model, a Hybrid Quantum Deep ...

In this work we answer several questions about the environmental impact of 5G deployment, including: Can we reuse minerals from discarded 4G base stations to build 5G or does 5G require new ...

Cellular base stations powered by renewable energy sources such as solar power have emerged as one of the promising solutions to these issues. This article presents an overview of the state-of-the-art in ...

We consider the problem of energy-efficient basestation (BS) planning for green cellular network design. There exist a number of criteria for greenness in the literature, but we focus only on the energy ...

To tackle this issue, this paper proposes a synergetic planning framework for renewable energy generation (REG) and 5G BS allocation to support decarbonizing development of future PDS.

This article conducts an in-depth exploration of key factors influencing 5 G base station deployment optimization, including base station types, locations, heights, and other critical ...

We present the green telecommunication network planning problem with switchable base stations, where the location and configuration of the base stations are optimized, while taking into ...

Problems with green base station planning

Web: https://idsolar.co.za