

Base station mixed power and communication signals





Overview

Can integrated sensing & communication (Isac) base stations be used for collaborative sensing?

Abstract: The collaborative sensing of multiple Integrated sensing and communication (ISAC) base stations is one of the important technologies to achieve intelligent transportation. Interference elimination between ISAC base stations is the prerequisite for realizing collaborative sensing.

What is a multi-functional base station?

Specifically, a multi-functional base station (BS) can enable multi-functional transmissions by exploiting the same radio signals to perform target/environment sensing, wireless communication, and wireless power transfer (WPT) simultaneously.

Can multiple Isac base stations communicate and radar sense simultaneously?

Interference elimination between ISAC base stations is the prerequisite for realizing collaborative sensing. In this paper, we focus on the mutual interference elimination problem in collaborative sensing of multiple ISAC base stations that can communicate and radar sense simultaneously by transmitting ISAC signals.

How BS fuses the echo signals from multiple BSS?

s of the echo signals from multiple BSs are crucial when fusing the echo signals from multiple BSs. Cooperative passive sensing: As illustrated in Fig. 2(b), multiple BSs transmit ISAC signals to the targets and a BS receives the echo signals of the other BSs reflected by the targets and fuses the echo



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