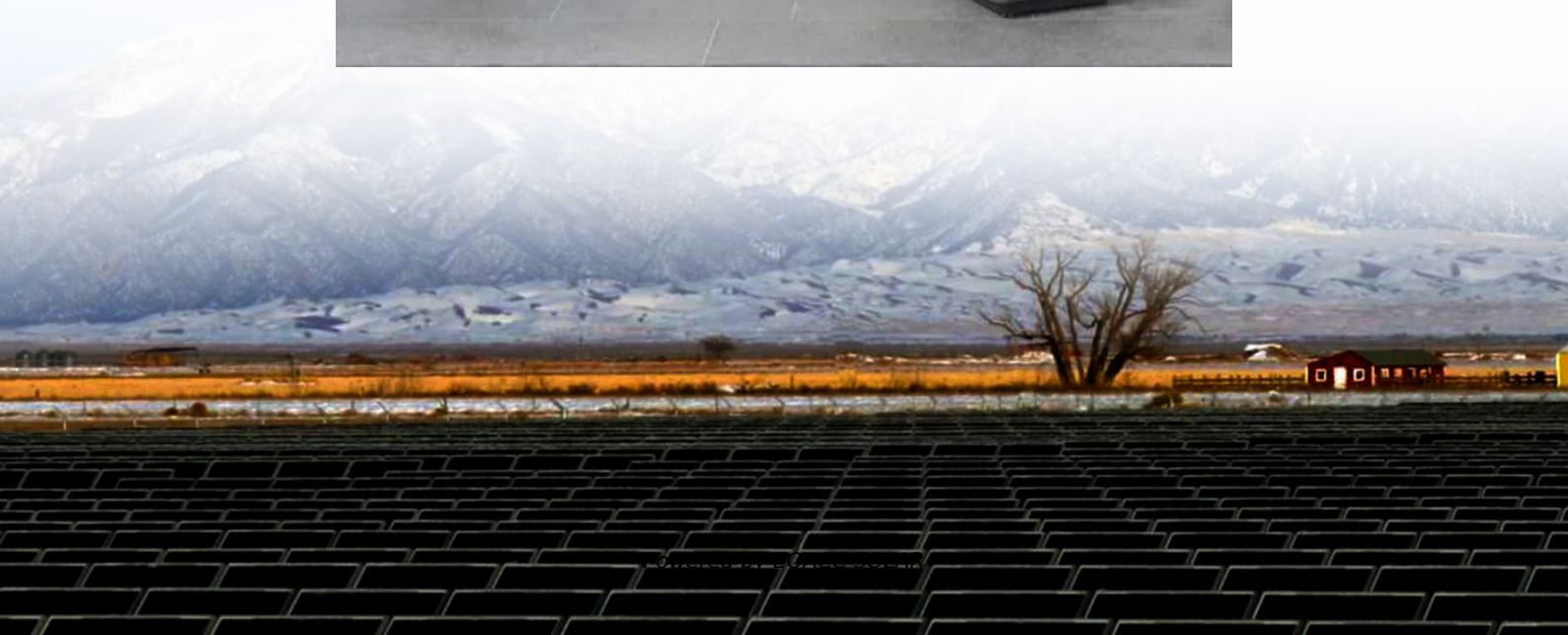


**EQACC SOLAR**

# **D2D communication of solar base stations**



## Overview

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What is communication in D2D?

The communication in D2D defines the direct communication technology among two cellular systems without subjecting via the base station. This assists to tune some cellular traffic to the D2D frameworks, improving the capacity of the network, enhancing the efficacy of spectrum, decreasing the latency, and scaling coverage 8.

Do traditional relay nodes consume their own energy to support D2D communication?

Moreover, traditional relay nodes consume their own energy to support D2D communication without gaining any benefit, affecting network sustainability. To address these challenges, this work proposes an efficient relay selection and resource allocation using the novel hybrid manta ray foraging with chef-based optimization (HMRFCO).

How does resource sharing affect D2d Network Sustainability?

However, resource sharing between relay-based and cellular D2D connections often results in mutual interferences, reducing the system sum rate.

Moreover, traditional relay nodes consume their own energy to support D2D communication without gaining any benefit, affecting network sustainability.

Why do we need scalable D2d network optimization solutions?

There is a requirement to address the limitations encountered by dynamic network conditions, such as varying channel conditions and user mobility, in the joint optimization process. Research is needed to develop scalable solutions that can handle a large number of D2D users and optimize resource allocation and relay selection in such scenarios.

## D2D communication of solar base stations

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### D2D communication and traditional base ...

Aiming at the problem of D2D communication mode selection and resource optimization under the joint resource allocation mode in 5G ...

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### Full-Duplex ISAC-Enabled D2D Underlaid Cellular Networks: ...

Integrating device-to-device (D2D) communication into cellular networks can significantly reduce the transmission burden on base stations (BSs). Besides, integrated ...



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### Towards energy-efficient joint relay selection and resource

Fifth generation (5G) networks are desired to offer improved data rates employed for enhancing innovations of device-to-device (D2D) communication, small base stations ...

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### Examining the efficiency of D2D communication employing ...

The introduction of D2D communication offers a significant opportunity to improve the efficiency and capacity of wireless networks. D2D communication allows for direct ...



### **RF Energy Harvesting by D2D Nodes within a Stochastic ...**

Abstract--Device-to-device (D2D) where users communicate directly with each other with limited base station involvement can significantly improve spectral efficiency, energy ...

### **Energy-saving transmission time and power management for D2D ...**

The incorporation of device-to-device (D2D) communication, utilizing the same spectral resources as cellular networks, is regarded as a pivotal development for the next ...



### **D2D communication and traditional base station relay communication**

Aiming at the problem of D2D communication mode selection and resource optimization under the joint resource allocation mode in 5G

communication network, a probabilistic integrated ...



## **D2D Satellite Communication : Benefits, Challenges and Use ...**

D2D Satellite Communication refers to communication paradigm where end user devices directly communicate with each other via satellite links, without relying on traditional ground based ...



## **D2D-aided Optimal Utilization of Renewable Energies for ...**

D2D-aided Optimal Utilization of Renewable Energies for Green Powered Base Stations In this paper, due to the unlimited growth of service demands and high load traffic, a ...

## **Optimal Mode Selection in D2D-Enabled Multi-Base ...**

Yuan Liu, Member, IEEE Abstract--In this paper, we consider device-to-device (D2D) communication underlaying uplink cellular networks with mul-tiple base

stations (BSs), ...



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### **Secure D2D Communication in Large-Scale Cognitive ...**

Abstract--In this paper, we investigate secure device-to-device (D2D) communication in energy harvesting large-scale cognitive cellular networks. The energy ...

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