PassiveLiFi Demonstration: Rethinking LiFi for Low-Power and Long-Range RF Backscatter

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1 - Introduction
- 64 billion internet-of-things (IoT) devices by 2025.
- Most of IoT devices depend on batteries.
- Batteries have a negative environmental impact.

2 - LiFi Technology
- Simultaneous illumination and communication with LEDs

3 - RF backscatter technology
- **RF backscatter**: Absorb and reflect RF carriers to transmit data with extreme low-power consumption

4 - PassiveLiFi system overview

5 - PassiveLiFi demonstration

6 - Applications
- Precision agriculture indoors
- Industry 4.0
- Smart homes

7 - Results

References


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