

# Design scheme and process of lead-acid battery for ground-to-air communication base station

What is a lead acid battery?

A new type of lead acid battery, the lead air battery, designed by altering the lead dioxide electrode to the air electrode, is put forward in this research. Two models are developed for simulating the activation polarization and time dependent processes respectively.

What are the research interests on the next generation of lead acid batteries?

At present, the research interests on the next generation of lead acid batteries is gradually increasing. The next generation of lead acid batteries still utilizes lead as active material and is expected to expand the applicable scope of lead acid battery and to reduce the amount of lead per energy unit.

How does a lead-acid battery work?

Such a device operates through chemical reactions involving lead dioxide (cathode electrode), lead (anode electrode), and sulfuric acid. Lead-acid batteries have a high round-trip efficiency, and are cheap and easy to install. It is the affordability and availability that make this type of battery dominant in the renewable energy sector.

Which is better lead air battery or lead acid battery?

The specific capacity of lead air battery is higher than lead acid battery. The amount of lead per energy unit in lead air battery is smaller than lead acid battery. A new type of lead acid battery, the lead air battery, designed by altering the lead dioxide electrode to the air electrode, is put forward in this research.

Why is the lead acid battery the most widely used secondary storage battery?

Since Gaston Planté demonstrated the lead acid battery in front of the French Academy of Sciences in 1860, the lead acid battery has become the most widely employed secondary storage battery because of its low cost (about 0.3 yuan Wh<sup>-1</sup>, data from Tianneng Battery Group Co., Ltd) and reliable performances.

When did lead acid batteries come out?

In the past, early in the "electrification age" (1910 to 1945), many lead acid batteries were used for storage in grids. Stationary lead acid batteries have to meet far higher product quality standards than starter batteries.

## **Design scheme and process of lead-acid battery for ground-to-air communication base station**

Web: <https://edukacja-aktywna.pl>

