SOLAR Pro.

What is condensed matter battery technology

What is a 'condensed matter' battery?

The Chinese battery giant considers it suitable for electric aircraft but also envisions use in road vehicles, with series production to start this year. Officially referred to as "Condensed Matter" battery, the new cells exhibit high safety and precisely that high energy density, as CATL's chief scientist Wu Kai stated at the trade show.

Can a condensed matter battery achieve mass production?

Chinese battery industry heavyweight CATL has unveiled a novel condensed matter battery technology with an energy density of up to 500 Wh/kg. The company said it can achieve mass productionwithin this year. On April 19,CATL unveiled its condensed battery technology at Auto Shanghai.

What is a condensed battery & how does it work?

The condensed battery boasts an impressive energy density of 500 Wh/kg, which is double that of Tesla's renowned 4680 cells. This high energy density makes the condensed battery particularly suitable for electric passenger aircraft, promising longer flight ranges and improved efficiency compared to current battery technologies.

What is CATL 'condensed battery' technology?

CATL is showing novel 'Condensed Battery' technology in Shanghai, which claims an energy density of 500 Wh/kg at the cell level. The Chinese battery giant considers it suitable for electric aircraft but also envisions use in road vehicles, with series production to start this year.

Will CATL be able to make a condensed matter battery?

CATL will also be able to start mass production of the condensed matter battery for electric vehicle uses later this year, Wu added.

What is condensed matter in physics?

In physics,"condensed matter" refers to materials in solid and liquid states of aggregation instead of gas and plasma.

At Auto Shanghai, Chinese battery giant CATL launched what it calls a "condensed battery"--a type of semi-solid state cell with an energy density of up to 500 Wh/kg. CATL says the cell can achieve high energy density and high level of safety at the same time, opening up a new electrification scenario for passenger aircraft.

 Battery)?

SOLAR Pro.

What is condensed matter battery technology

The so-called "condensed matter" battery, a type of semi-solid state product with condensed electrolyte and new anode and separator materials, will have an energy density of up to 500 Wh/kg.

Aiming at the electrochemical reaction changes of ultra-high specific energy chemical materials, CATL adopts high-dynamic biomimetic condensed electrolytes to ...

Unlike traditional batteries that deploy liquid or gel electrolytes, a condensed matter battery employs a solid-state electrolyte. This transition holds the promise of the battery being leak-proof, drastically reducing fire risks.

CATL, a leading Chinese battery manufacturer, has recently unveiled a groundbreaking innovation in battery technology known as the condensed battery. This cutting ...

On April 19, CATL launched condensed battery, a cutting-edge battery technology at Auto Shanghai. With an energy density of up to 500 Wh/kg, it can achieve high energy density and high level of safety at the same time in a ...

CATL, a leading Chinese battery manufacturer, has recently unveiled a groundbreaking innovation in battery technology known as the condensed battery. This cutting-edge technology has...

Web: https://roomme.pt