

German solid state battery





Overview

Are solid-state batteries the Holy Grail?

We take a closer look. Solid-state batteries are considered the holy grail in the battery world, with more capacity than current lithium-ion batteries. Will a German start-up be the first to mass produce them?

We take a closer look.

What is a solid-state battery?

Solid-state battery mainly consists of a solid electrolyte separator, anode and cathode active materials. The most promising anode active materials to achieve high energy density are lithium metal and silicon.

What is a solid-state battery roadmap?

Based on an extensive literature review and an in-depth expert consultation process, the roadmap critically evaluates existing research as well as the latest findings and compares the development potential of solid-state batteries over the next ten years with that of established lithium-ion batteries.

Are solid state batteries better than lithium ion batteries?

According to the website Flash Battery Tech, the latest studies on solid state batteries show that they have an energy density 2-2.5 times higher than current lithium-ion technology. This would deliver a lighter and smaller battery capable of enabling greater range and lighter weight.

Can solid-state batteries replace flammable liquid electrolytes?

Solid-state batteries (SSBs) with solid electrolytes (SEs) to replace organic flammable liquid electrolytes (LEs) can ultimately solve the safety problems and hopefully improve key battery performances [1, 2]. In May 2022, Fraunhofer ISI has developed Solid-State Battery Roadmap 2035+ .



What is Fraunhofer ISI's solid-state battery roadmap 2035+?

In May 2022, Fraunhofer ISI has developed Solid-State Battery Roadmap 2035+ . Fraunhofer ISI is supporting the German battery research with a roadmap and monitoring process, strategic information processing and status seminars for the exchange of information on scientific progress and technology transfer.



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Quantum leap in battery technology / German start-up develops ...

German start-up develops the world's first solid-state battery ready for series production - Outstanding properties: no cobalt, 10 times longer service life and non-flammable ...

[German Innovations in Solid-State Battery ...](#)

The advancements in solid-state batteries by German companies like HPB and BMW's innovative approaches in battery technology herald a new era for EVs and energy storage.



Germany: Fraunhofer 100MWh solid state factory plans finalised

ASX-listed Altech Chemicals and research institute Fraunhofer-Gesellschaft have progressed plans for a 100MWh plant in Germany to produce the latter's energy storage ...



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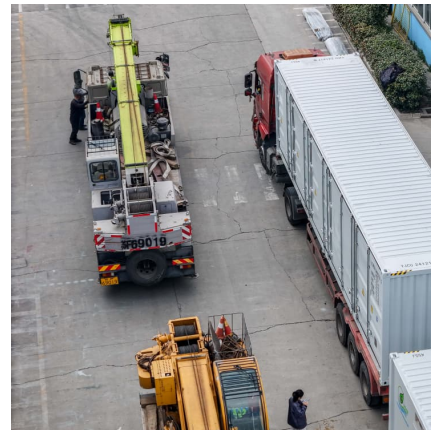


All-Solid-State Batteries

Our research work in the field of All-Solid-State Batteries ranges from the development of customized electrode materials and battery cell components to the assembly of complete cell ...

[Quantum leap in battery technology / German start-up ...](#)

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Innovative lithium solid-state battery on the verge of a breakthrough

The new generation of solid-state batteries appears to be a great source of hope for the battery market, but manufacturers have not yet reached their goal. In order to be ready ...



German start-up develops the world's first solid-state battery ...

A team of scientists working for Bonn-based company High Performance Battery (HPB), led by Prof. Dr. Günther Hambitzer, has achieved a decisive breakthrough in ...



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[German Sodium Chloride Solid State \(SCSS\) Battery ...](#)

Altech Batteries Limited has executed a joint venture agreement with leading German battery institute, Fraunhofer IKTS ("Fraunhofer") to commercialise the Sodium Chloride Solid State (SCSS) Battery.



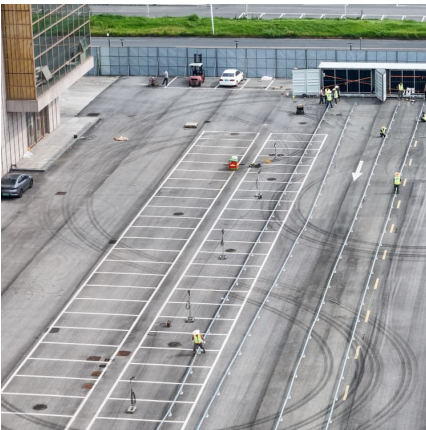
[Solid-state batteries made in Germany - DW - ...](#)

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[Solid-state batteries made in Germany - DW - 11/01/2024](#)

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The German solid-state sodium-sulfur battery landed in China, ...

On April 5, at the "Invest in China" German special promotion event, the German Institute for Sustainable Physics and Technology announced a shocking R& D result - a full set ...

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