

What is QuantumScape battery technology?

QuantumScape is on a mission to transform energy storage with solid-state lithium-metal battery technology. The company's next-generation batteries are designed to enable greater energy density, faster charging and enhanced safety to support the transition away from legacy energy sources toward a lower carbon future.

Does QuantumScape make EV batteries?

In a public letter to shareholders posted on October 23, QuantumScape announced that it has begun producing B Samples of its new QSE-5 solid state EV battery cells, and shipping them to customers for testing.

Does QuantumScape manufacture lithium-metal battery separators?

SAN JOSE, Calif., December 05, 2024 -- (BUSINESS WIRE)-- QuantumScape Corporation (NYSE: QS), a leader in solid-state lithium-metal battery technology, today announced that next-generation heat treatment equipment for its separator production process, Cobra, has been developed, delivered, installed and released for initial separator processing.

Does QuantumScape make low volume battery cells?

In October, QuantumScape announced it had started producing and shipping the first low-volume B samples battery cells for automotive customer testing. The QSE-5 B sample features energy density of 844 Wh/L and is able to fast charge from 10% to 80% in 12.2 minutes. Ramp Raptor process.

How will QuantumScape's lithium-metal solid-state batteries work?

QuantumScape's lithium-metal solid-state batteries will charge faster, go farther, last longer and operate more safely than today's EVs and gas-powered vehicles -- bringing us closer to that lower carbon future. Do you want to help build one of the most critical parts of the future energy economy?

Can QuantumScape improve battery energy density?

QuantumScape's technology platform is designed to pair with a variety of cathode chemistries -- with the potential to significantly improve the energy densities of today's Nickel Manganese Cobalt (NMC) and Lithium Iron Phosphate (LFP)-based battery cells.

Battery scientists are familiar with the term "C/3 cycling," which means the battery is charged in three hours and then discharged at the same rate. This test attempts to approximate freeway driving and a modest recharge rate, but in the real world, drivers want to be able to cover long distances quickly, which means faster recharging times.

QuantumScape's newly-released results, based on testing of single layer battery cells, show its solid-state separators are capable of working at very high rates of power, enabling a 15-minute charge to 80% capacity, faster than either conventional battery or alternative solid-state approaches are capable of delivering.

These limitations are largely due to fundamental constraints of battery design. QuantumScape's technology has been designed to overcome many of these constraints, to unlock a step-change in fast-charging performance that has profound implications for EV adoption and the potential to win over a segment of drivers who might otherwise hesitate ...

SAN JOSE, Calif. - January 27, 2022 - QuantumScape Corporation (NYSE: QS), a leader in the development of solid-state lithium-metal batteries, today released data showing its battery cells have completed 400 consecutive 15-minute fast-charging (4C) cycles from 10% to 80% of the cell's capacity while retaining well above 80% of the initial energy - a first for this type of ...

Solid-State Battery Landscape. February 16, 2021. View this Presentation PDF Format Download (opens in new window) ... At QuantumScape, we promise to treat your data with respect and will not share your information with any third party. You can unsubscribe to any of the investor alerts you are subscribed to by visiting the "unsubscribe ...

In sum, the QSE-5 B sample represents a significant advancement in battery technology and an important milestone for QuantumScape. Its impressive topline energy density also provides an example of the importance of the individual factors that go into delivering energy density in automotive applications, such as the physical cell dimensions, discharge rate, ...

SAN JOSE, Calif.-(BUSINESS WIRE)-QuantumScape Corporation (NYSE: QS), a leader in next-generation solid-state lithium-metal battery technology, today announced it started customer shipments of Alpha-2 prototype battery cells, fulfilling a goal for 2024. Alpha-2 prototypes are a significant milestone on the roadmap to deliver QSE-5, QuantumScape's first planned ...

Quantum Scape ??????? QuantumScape?????????????????,???2012?,????????????????????????Kostas Kostarelos?Jens Honer,??????????????????...

In this Q& A Forum, QuantumScape executives discuss frequently asked questions about our technology and state of the business. Participants (clockwise from top left corner): Jagdeep Singh, Founder and CEO, John Saager, Head of Investor Relations, Celina Mikolajczak, Vice President of Manufacturing Engineering, and Tim Holme, Founder and CTO.

SALZGITTER, Germany & SAN JOSE, Calif. -- July 11, 2024 -- Volkswagen Group's battery company PowerCo and QuantumScape (NYSE: QS) today announced they have entered into a groundbreaking agreement to industrialize QuantumScape's next-generation solid-state lithium-metal battery technology. Upon satisfactory technical progress and certain royalty ...

QuantumScape Corporation (NYSE: QS), a leader in solid-state lithium-metal battery technology, today announced that next-generation heat treatment equipment for its separator production process ...

QuantumScape Corporation (NYSE: QS), a leader in solid-state lithium-metal battery technology, today announced that next-generation heat treatment equipment for its separator production process, Cobra, has been developed, delivered, installed and released for initial separator processing. Achieving this milestone on schedule puts the company on track ...

I asked AI to generate listing of headlines for a company like QuantumScape that had its first sale, record sales, record volume of units sold and product upgrades just to name a few. Below is the list: ... per kWh but the battery alone is a quarter to a third of the vehicle's weight, a QS battery would weigh much closer to a tank load of gas ...

He added the solid-state battery will deliver about 30% more range than a liquid-type battery of the same size and weight. This means that the existing VW ID.3 GTX, specified to cover 605km on a single charge, will be capable of 780km. Fig 4: Model of a QuantumScape QSE-5 solid-state battery for electric vehicles. QuantumScape.

Cobra represents a significant innovation in ceramic solid-state separator production, benefiting both scalability and cost efficiency. This milestone is the culmination of years of advanced R& D on QuantumScape's fast separator production process - the core innovation that will allow its battery technology to be manufactured at gigawatt-hour scale.

On January 4, 2021, an article published on Seeking Alpha raised questions about QuantumScape's battery technology, pointing out potential issues with capacity, range, and real-world performance. ...

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