

We provide residential solar, battery storage, and custom solutions for homes, built to last with quality and backed by decades of solar expertise.

Researchers have developed a new aluminum-ion battery that could address critical challenges in renewable energy storage. It offers a safer, more sustainable, and cost-effective alternative to...

Solar panels work through the photovoltaic (PV) effect. When sunlight hits the panels, it creates an electric current that is first used to power electrical systems in your home.

For the first time, a complete aluminum-graphite-dual-ion battery system has been built and tested, showing that lithium-free, high-power batteries can deliver stability, fast response, and...

Researchers develop a cost-effective, recyclable aluminum-ion battery with enhanced stability and lifespan, advancing renewable energy storage.

There are two main types of solar energy technologies--photovoltaics (PV) and concentrating solar-thermal power (CSP). On this page you'll find resources to learn what solar ...

An introduction to solar energy and types of solar energy conversion technologies including solar thermal and solar photovoltaics (PV).

Aluminum-ion batteries are ideal for home energy storage. They are cost-effective, long-lasting, and provide fast power delivery, making them perfect for storing solar energy and powering homes without ...

Discover how breakthrough aluminum ion battery technology in 2025 is outperforming lithium-ion with 10,000+ cycle life, superior safety, and 60x faster charging for renewable energy storage and electric ...

Solar energy is a form of renewable energy, in which sunlight is turned into electricity, heat, or other forms of energy we can use. It is a "carbon-free" energy source that, once built, ...

Solar technologies are categorized as either passive or active depending on the way they capture, convert and distribute sunlight and enable solar energy to be harnessed at different levels around the ...

Now, researchers have developed a new aluminum-ion (Al-ion) battery that is cost-effective, environmentally friendly, and capable of lasting 10,000 cycles with minimal performance loss.

Home solar panels are rapidly becoming mainstream. We'll help you decide if a home solar panel system is

right for you.

But with the global energy storage market booming at \$33 billion annually [1], this topic is hotter than a lithium-ion battery on overdrive. This article breaks down why aluminum-based systems are stealing ...

Researchers develop a cost-effective, recyclable aluminum-ion ...

Through various characterization methods, the relationship between Al battery structure and performance is analyzed, providing theoretical support for further optimizing the energy storage capacity and ...

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