

Installed capacity surged to a new high with 597 GW added worldwide, a 33% jump over 2023. From advanced materials like perovskite-silicon tandems to smart, AI-driven power systems, ...

Discover the latest advancements in next-gen solar panels, including high-efficiency materials like perovskite, quantum dots, and tandem cells. Explore innovative designs such as bifacial, ...

We now have bifacial panels that capture sunlight from both sides, perovskite solar cells that promise higher efficiency at lower costs, and smart solar tracking systems that ensure maximum ...

This overview explores commonly used materials for solar and wind power, exploring their limitations and continuing research trends for more sustainable and improved materials for these two ...

Using advanced materials like transparent luminescent solar concentrators (TLSCs) or semi-transparent perovskite cells, this new solar panel technology allows surfaces such as windows, ...

New sophisticated materials including perovskites, tandem cells, quantum dots, and ultra-thin solar films have improved performance to new historic efficiency milestones.

In November 2023, a buzzy solar technology broke yet another world record for efficiency. The previous record had existed for only about five months--and it likely won't be long before it too is...

By synthesizing current and emerging trends, this review offers valuable insights into the future trajectory of solar PV systems, emphasizing the potential for improved efficiency, cost ...

Solar energy is no longer just panels bolted to a roof or field. In 2026, new solar panel technology is driving dramatic improvements in how we capture, store, and use sunlight. Ongoing ...

We explore the nine most exciting developments in the solar industry in 2025, from indoor solar panels to "two-for-one" fission. What kind of home do you live in? combine traditional silicon with ...

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