Saudi Arabia perovskite solar panels

Researchers in the King Abdullah University of Science and Technology (KAUST) Solar Center have developed the world"s most efficient silicon/perovskite tandem solar cell at 33.2% efficiency.

Professor Stefaan De Wolf and the KAUST Photovoltaics Laboratory have laid out a comprehensive roadmap in Science, signalling a significant step toward making perovskite/silicon tandem solar cells a staple in the global clean energy landscape.

Metal halide perovskite solar cells (PSCs) have attracted significant research attention in the past years and are regarded as a promising candidate for next-generation photovoltaic technology. This unprecedented surge in device performance is a testament to the extent to which PSCs upended the scientific knowledge of solution-processed ...

The Saudi research institute said its new four-terminal tandem device has achieved the highest efficiency ever reported for perovskite-based 4-T and triple-junction tandem solar cells to date.

Scientists in Saudi Arabia are working on tandem solar cells, a development that they say could become a $10 billion market. Professor Stefaan De Wolf and the Photovoltaics Laboratory at King Abdullah University of Science and Technology (Kaust) have published a paper setting out how the perovskite-silicon cells can be brought to market.

Researchers at the King Abdullah University of Science and Technology (KAUST) in Saudi Arabia have outlined a roadmap for the commercialization of perovskite-silicon tandem solar...

Professor Stefaan De Wolf and the KAUST Photovoltaics Laboratory have written in Science a roadmap for bringing perovskite/silicon tandem solar cells to market, paving the way for a future powered by abundant, inexpensive clean ...

Jeddah, January 18, 2024, SPA -- Scientists at the King Abdullah University of Science and Technology (KAUST) unveiled today a roadmap for bringing perovskite/silicon tandem solar cells to market, paving the way for a future powered by abundant, inexpensive clean energy in Saudi Arabia and the world.

Researchers in the KAUST Photovoltaics Laboratory of the KAUST Solar Center have produced a perovskite/silicon tandem solar cell with a power conversion efficiency (PCE) of 33.2% -- the highest tandem device efficiency in the world to date, surpassing that of Helmholtz Zentrum Berlin"s (HZB) record at 32.5% PCE.

To increase the performance of solar panels, an international collaboration--including researchers from

KAUST and University of Toronto Engineering--has created a two-sided, tandem solar cell, built by bringing together the best of the perovskite and silicon technologies.

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