

Inspired by the retarded biological activities of cells in heavy water, we replaced the light H atom with its abundant, twice-as-heavy, nonradioactive isotope, deuterium (D) to hamper the motion of H.

While most fusion experiments use fuels like hydrogen or deuterium alone, testing with this deuterium-tritium mix is essential to get as close as possible to the conditions of a real fusion ...

Motivated by energy shortages and in view of current efforts to develop clean, renewable energy sources based on fusion, a solar-driven strategy has been developed for deuterium evolution.

This study opens a new avenue to discover promising photocatalytic deuterium generation systems for advanced solar energy utilization and deuterium enrichment.

As one particular example, deuterium can serve as fuel for fusion reactors, which have long promised virtually unlimited power in what is essentially an replica of the sun.

Deuterium D₂ - Spectrum discharge tube - metal free! This new spectrum discharge tube is an enhancement of our gas ampoules with all its benefits not having any metals parts but the ...

Motivated by energy shortages and in view of current efforts to ...

As a result, perovskite solar cells incorporating this deuteration strategy achieve exceptional performance, including a high fill factor (FF) of 82.6% and a power conversion efficiency ...

Deuterium and tritium are promising fuels for producing energy in future power plants based on fusion energy. Fusion energy powers the Sun and other stars through fusion. Deuterium and tritium are ...

In fuel cells, deuterium gas combines with oxygen to produce water, releasing a large amount of energy, which can be used in power generation and automotive applications.

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