

With the pressing global energy and environmental issues, solar water evaporation (SWE), which generates vapor using solar energy, emerges as a promising and sustainable approach, ...

Solar-powered vapor evaporation (SVG), based on the liquid-gas phase conversion concept using solar energy, has been given close attention as a promising technology to address the ...

Plasmon-enhanced solar vapor generation (SVG) has been extensively studied in the last decade as a technology for efficient water purification.¹ SVG is a natural photothermal phenomenon ...

Solar-driven water vaporization system fabricated with carbon dots achieved solar-to-steam efficiency of 92.7% with an impressive evaporation rate of $2.27 \text{ kg m}^{-2} \text{ h}^{-1}$ under one sun ...

Photothermal materials with broad solar absorption and high conversion efficiency have recently attracted significant interest. They are becoming a fast-growing research focus in the area of ...

Solar-driven interfacial evaporation technologies use solar energy to heat materials that drive water evaporation. These technologies are versatile and do not require electricity, which enables...

Photothermal-based solar vapor generation, which harvests solar energy and localizes the generated heat by black absorbers for water evaporation, is thought as an advanced clean ...

In this review, we aim to illustrate the definition, mechanism and figures of merit of interfacial solar vapor generation, and to summarize the development progress of relevant materials ...

It offers an overview of the research progress of hydrogel solar evaporators based on the working principles of the Solar-driven Interfacial Evaporation (SDIE) system, including photothermal ...

Herein, we present a bilayer-structured solar evaporator (SDWE) with dynamic fluidic flow mechanism, designed to ensure a thin water supply and self-cleaning capability.



Solar vaporization system

Web: <https://www.minimercadofortem.es>

