Title: Columnar solar power generation
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The 3.7 m scale buoyancy-induced, columnar vortex facility: (a) top and side views of experimental setup showing heated surface and adjustable azimuthal flow vanes and (b) smoke visualization of ...

The aim of this study is to design and evaluate a Columnar Energy Storage Device (CESD) that combines solar heat collection with natural reflective supplementary lighting.

[0022] In summary, the cylindrical solar power generation device pointed out in the present invention has a large light-receiving area, a small footprint, a small volume, convenient transportation, high power ...

Thermally-stratified air layers over solar-heated ground are exploited for scalable, low-cost power generation by the deliberate formation of intense buoyancy-induced vertical columnar vortices.

The application relates to the technical field of solar power generation, in particular to a manufacturing method of a columnar solar power generation device.

Buoyancy-Induced Columnar Vortices for Power Generation Abstract Submitted for the DFD10 Meeting of The American Physical Society

Impact Summary: If successful, Georgia Tech"s technology would reduce the cost of energy by 20% over wind power and 65% over solar photovoltaic energy.

With such configuration, solar irradiance levels are made uniform by each row in the height direction, said row facing the same direction, and each of the blocks can efficiently generate...

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