

This paper presents a systematic work around the wind-induced response and instability characteristics of the large-span flexible PV support array, the results are of significance for ...

The application belongs to the field of photovoltaic supports, and discloses a large-span flat single-axis tracking type flexible photovoltaic support system, which comprises a load-bearing ...

There are, however, few studies concerned with the aeroelastic vibration of PV structures under the tension cable support system. Tamura et al. [14] studied the aerodynamic ...

Compared with independent flexible PV support, the entire structure force performance and transfer mechanism of inter-row cables and inter-span rods of flexible PV support arrays are ...

The flexible photovoltaic support originates from the roof of suspension structure and glass curtain wall. It is a photovoltaic support system supported by suspension structure. ... Flexible ...

Flexible photovoltaic (PV) support structure offers benefits such as low construction costs, large span length, high clearance, and high adaptability to complex terrains. However, due to the ...

To reduce structural deadweight without sacrificing stiffness and strength, a large-span offshore fixed truss is designed for bearing photovoltaic devices, and correspondingly, a material ...

This study evaluates the potential of solar photovoltaic (PV) power generation on the roofs of residential buildings in rural areas of mainland China and calculates the area ...

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However, because the cable-supported PV modules also possess high flexibility and low damping, they are prone to large vibrations under wind excitation. ... obtain the wind ...

In this study, the large-span flexible PV support array in a 66 MW "Fishing-light complementation" demonstration base in eastern coastal regions in China was chosen as the ...

Therefore, how to build a stable and reliable flexible photovoltaic support on a large-span space which is not suitable for adding an intermediate support, such as a channel, and the like, and ...

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