Master Xu s solar power generation

Can a hierarchical porous hybrid film harvest solar energy for generation?
Here,we present a hierarchical porous hybrid film composed of nanofibres of cellulose on which conductive metal-organic frameworks have been layered to enable photothermal conversion and regulation of ion transport that can harvest solar energy for generation of electricity.

Is a freestanding hybrid film suitable for solar power generation?
Solar energy fits well with the increasing demand for clean sustainable energy. This paper describes a freestanding hybrid film composed of a conductive metal-organic framework layered on cellulose nanofibres which enables efficient solar power generation.

What is China's first large-scale molten salt energy storage thermal power station?
Cai ZY. China's first large-scale molten salt energy storage thermal power station successfully put into operation. Hangzhou (weekly) 2016;426(19):58. [Google Scholar] Chen X, Fan HT. Development status of solar thermal power generation technology. Energy Environ. 2012;110(1):90-92. [Google Scholar]

Can concentrating solar power systems generate electricity in Thailand?
Janjai S, Laksanaboonsong J, Seesaard T. Potential application of concentrating solar power systems for the generation of electricity in Thailand. Appl Energy. 2011;88(12):4960-4967. doi: 10.1016/j.apenergy.2011.06.044.

Which solar-powered clean water production system has the highest Vaporization Enthalpy?
Taking the benefits of the efficient vaporization enthalpy recycling,the PV-MD5 systemachieved the maximum clean water production rate of 11.6 kg m -2 day -1,positioning it among the best-performing solar-powered clean water production systems without additional energy input (Fig. 7 f and Table S5).

Who is Xiaofeng Xu?
Prof. Xiaofeng Xu received his Ph.D. from State Key Laboratory of Luminescent Materials & Devices, South China University of Technology in 2011. During 2011-2014, he was a research fellow at Nanyang Technological University, Singapore. During 2014-2017, he worked as a post-doc at Chalmers University of Technology, Sweden.

Harnessing ubiquitous moisture and sunlight for water and power generation is a sustainable route to address these challenges. ... Xu, J. X. et al. Ultrahigh solar-driven ...

It is dicult to precisely forecast on-site power generation due to the intermittency and uctuation characteristics of solar and wind energy. Solar and wind generation data from on-site sources are

This paper describes a freestanding hybrid film composed of a conductive metal-organic framework layered

on cellulose nanofibres which enables efficient solar power generation. The ...

Compared to conventional ground-mounted photovoltaic (PV) cells, floating photovoltaic (FPV) cells open new opportunities for scaling-up solar power generation, especially in highly ...

A new PV Generation Power Prediction model Based on GA-BP Neural Network with Artificial Classification of History Day is proposed, which is for the weather type of the forecast day. PV ...

The efficiencies of the solar cells at indoor conditions were calculated with equation (2), where P out (W cm -2) is the output power of the solar cell and P in (W cm -2) is the incident power ...

Solar energy fits well with the increasing demand for clean sustainable energy. This paper describes a freestanding hybrid film composed of a conductive metal-organic framework layered on cellulose nanofibres which enables ...

Designed for industrial use in hot, arid regions, our solar power panels have low heat degradation and high durability. Our equipment is well-suited for solar power installations throughout Africa. ...

Jinliang Xu"s 59 research works with 870 citations and 4,312 reads, including: The influence of tube diameter parameters on the flow resistance and heat transfer characteristics of ...

Mushrooms, as a kind of living organism, are surprisingly found to be efficient solar steam-generation devices for the first time. Natural and carbonized mushrooms can achieve ?62% and ?78% conversion efficiencies ...