How about photosynthetic solar power generation

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In harnessing photosynthesis to produce green energy, the native photosynthetic system is interfaced with electrodes and electron mediators to yield bio-photoelectrochemical cells (BPECs) ...

Given its power, it"s no surprise that scientists have long tried to imitate photosynthesis. The idea of using sunlight to split water and create fuel--known as artificial photosynthesis --has ...

Wind power and solar power, harnessed by photovoltaic cells, are the two major forms of clean energy available. Adding a third -- synthetic photosynthesis -- would dramatically change the ...

Electrons from different photosynthetic electron transport chains can be rewired to new-to-nature pathways, creating biotechnologies for solar-powered electricity generation and chemical...

The integration of plant photosynthesis into microbial fuel cells and the generation of solar photovoltaic energy under an agro-photovoltaic scheme has shown promising results, capable ...

Unlike traditional solar panels that convert sunlight directly into electricity, photosynthetic solar power stations target the natural efficiencies of biological systems combined with technological ...

Current photosynthetic solar cells often make use of non-renewable components, which can pose environmental risks [1]. Therefore, there is a need to develop renewable and non-toxic ...

The researchers designed a biofuel cell that exploits these photosynthetic products (glucose and O2) by employing enzyme-modified electrodes. The device was implanted into a living ...

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