Science fiction solar power station

What is a solar power station?

It sounds like science fiction: giant solar power stations floating in space that beam down enormous amounts of energy to Earth. And for a long time, the concept - first developed by the Russian scientist, Konstantin Tsiolkovsky, in the 1920s - was mainly an inspiration for writers.

Could a space power station be a precursor to solar power?

A collection of LEO (low Earth orbit) space power stations has been proposed as a precursor to GEO (geostationary orbit) space-based solar power. The Earth-based rectenna would likely consist of many short dipole antennas connected via diodes.

Could a solar power station be built in space?

It's also dependent on good weather,as cloud cover will reduce the amount of energy that can be collected. If we could build a solar power station in space,though,we'd avoid these issues. Such a station could collect solar power 24 hours a day and wouldn't need to store energy in bulky batteries.

Is photovoltaics a science fiction concept?

Ali Hajimiri: This concept was,in the past,truly science fiction. What made it possible for us to consider taking it from the realm of science fiction to the realm of reality was the combination of developments happening in photovoltaics in Harry's lab,in structures in Sergio's lab,and in wireless power transfer,which is happening in my lab.

Where can I find information about space solar power?

The National Space Societymaintains an extensive space solar power library Archived 2018-04-14 at the Wayback Machine of all major historical documents and studies associated with space solar power,and major news articles Archived 2016-05-29 at the Wayback Machine. ^"Space-based solar power".

Can space-based solar power be used on Earth?

Space-based solar power, once a topic for science fiction, is gaining interest. The sun, photographed from the International Space Station about 260 miles above the Pacific Ocean. Wireless power transfer in space is opening the door to harnessing the power of the sun to provide usable power on Earth. NASA

Once considered science fiction, technology capable of collecting solar power in space and beaming it to Earth to provide a global supply of clean and affordable energy is moving closer to reality. Through the Space-based Solar Power ...

OverviewHistoryAdvantages and disadvantagesDesignLaunch costsBuilding from spaceSafetyTimelineIn 1941, science fiction writer Isaac Asimov published the science fiction short story "Reason", in which a space station transmits energy collected from the Sun to various planets using microwave beams. The

SBSP concept, originally known as satellite solar-power system (SSPS), was first described in November 1968. In 1973 Peter Glaser was granted U.S. patent number 3,781,647 for his ...