

Well, here's something you don't hear every day - the same factories making solar panels and computer chips are racing to solve nearly identical sustainability challenges.

With generative artificial intelligence (AI) advancing in leaps and bounds, tech giants are racing to power the energy-hungry computer systems running it all.

Described in two papers published in the journal Nature, Lightmatter's photonic computer chips that combine the use of light and electricity are shown to increase computational performance,...

Using the power of light, future computers could be not only faster but also much more energy efficient--just what we need as AI technology continues to grow.

Orbital data centers could run on practically unlimited solar energy without interruption from cloudy skies or nighttime darkness. If it is getting harder to keep building bigger server farms...

By using light (photons) instead of electricity (electrons) for the transport and processing of information, photonic computing promises higher speeds and greater bandwidths with greater efficiency.

In this paper we will explain the technological changes that have made solar power cost feasible for PC deployments, and provide an overview of how to design for a solar powered PC deployment.

Recent results suggest that, for certain computational tasks fundamental to modern artificial intelligence, light-based "optical computers" may offer an advantage.

Explore the intersection of Future Computer and Solar Energy. Discover eco-friendly solutions and sustainable tech innovations for a greener future.

Optical chips -- semiconductor chips that run on light rather than electricity -- could solve these problems, say researchers working in the field.

Web: <https://www.black-hat.co.za>