Organic ultra-light solar film material

Are organic materials suitable for photovoltaics?
Organic materials are attractive for photovoltaicsprimarily through the prospect of high throughput manufacture using reel-to-reel or spray deposition. Additional attractive features are the possibilities for ultra thin,flexible devices which may be integrated into appliances or building materials,and tuning of colour through chemical structure.

What are ultrathin organic solar cells?
The processing methods are standard, so the same weight and flexibility should be achievable in light emitting diodes, capacitors and transistors to fully realize ultrathin organic electronics. These ultrathin organic solar cells are over ten times thinner, lighter and more flexible than any other solar cell of any technology to date.

What is ASCA ® organic photovoltaic (OPV) film?
As a result of many years of research and development,the ASCA ® organic photovoltaic (OPV) film is a breakthrough solar solution for the energy transition challenge. The unique properties of this environmentally friendly,custom-made solution is capable of making virtually any surface active,regardless of its shape or material.

What makes our Solar Films unique?
The organic stack in our solar films consists of many individual layers but has a total thickness of only less than a thousandth of a millimeter. As a result,our solar films have unique properties: They are ultra-light,flexible,ultra-thin,and truly green.

Can solar film be used on building surfaces?
This ready-to-use solution can be used on various building surfaces. The solar film has an integrated backside adhesive,which means that it can be easily glued on the surface and can be connected and used immediately due to the integrated connection cables.

What are organic photovoltaic (OPV) solar cells?
Organic photovoltaic (OPV) solar cells are highly promising in this sector. The thin-film devicescomprise two electrodes,a light-harvesting active layer and blocking or transport layers. The total thickness of a functional OPV cell is only a few hundred nanometres.

Research Dresden (IPF), has started its work on the development of novel absorber materials for vacuum-processable, organic solar cells. This technology has been developed by Heliatek GmbH (Dresden, Germany) over the past decade and has been commercialized as Heliatek"s organic solar film product HeliaSol®.

Organic light-emitting diode (OLED) is an emerging technology of organic electronics that exhibits an

assortment of salient and attractive features like self-emitting ability, great flexibility, true dark tone, transparency and many more. Along with display applications, OLEDs are prudent for light detection-based applications. Enormous research work has been ...

ASCA® technology is based on organic photovoltaics (OPV) and represents a groundbreaking solution for the energy transition. The unique properties of this environmentally friendly, custom-made technology enable almost any surface to be energetically activated, regardless of its external shape and the integration material.

and construction material industry, to integrate into their façade or roof system products. Heliatek employs more than 200 people at the Dresden and Ulm locations in Germany. Products: HeliaSol® ®& HeliaFilm With HeliaSol, we offer a ready-to-use innovative organic solar film, which is ultra-light, flexible, ultra-thin and truly green ...

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Researchers at Hiroshima University are creating organic photovoltaics that are sustainable and offer many benefits over traditional silicon-based solar panels.

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