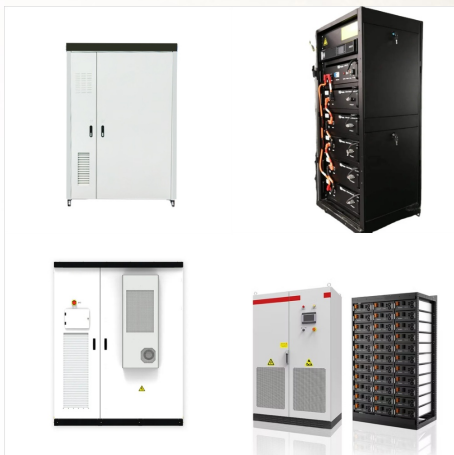




Hot spotting is a reliability problem in photovoltaic (PV) panels where a mismatched cell heats up significantly and degrades panel performance. High temperature Published in: IEEE Journal of Photovoltaics (Volume: 5, Issue: 5, September 2015) Article #: Page(s): 1435 - 1441. Date of Publication: 23 June 2015 . ISSN Information: Print



760 IEEE JOURNAL OF PHOTOVOLTAICS, VOL. 5, NO. 3, MAY 2015 Fig. 1. Temperature and pressure profiles of the encapsulation process used in this study. The black line is the measured temperature in EVA throughout the process, with a heating plate temperature of 140 °C. The red line represents the



This study aims to comprehensively calculate the conversion efficiency limits of multijunction solar cells having crystalline silicon (c-Si) not only as a growth substrate but as the lowermost active ???



A novel, contactless, noninvasive, and nondestructive method of crack detection in crystalline Si solar cells has been developed. A thermal imaging camera detecting in the 7.5-13- μ m wavelength range was used to image the specular reflection of an IR source on the surface of a crystalline Si cell. The surface distortion caused by the presence of a crack was found to



Indonesian J Elec Eng & Comp Sci, Vol. 12, No. 3, December 2018 : 1373-1379
cultural heritage preservation can contribute to other aspects of life, such as tourism, content industry



IEEE JOURNAL OF PHOTOVOLTAICS, VOL. 6, NO. 5, SEPTEMBER 2016
Strategies for Doped Nanocrystalline Silicon Integration in Silicon Heterojunction Solar Cells
Johannes P. Seif, Antoine Descoeudres, Gizem Nogay, Simon Hanni, Silvia Martin de Nicolas, Niels Holm,



Index IEEE Journal of Photovoltaics Vol. 6 Abstract:
Presents the 2016 author/subject index for this
publication. Published in: IEEE Journal of
Photovoltaics (Volume: 6, Issue: 6, November
2016) Article #: Page(s): 1689 - 1736. Date of
Publication: 10 November



abstract = "This study aims to comprehensively
calculate the conversion efficiency limits of
multijunction solar cells having crystalline silicon
(c-Si) not only as a growth substrate but as the
lowermost active subcell as well.



62 IEEE JOURNAL OF PHOTOVOLTAICS, VOL. 5,
NO. 1, JANUARY 2015 owing to the narrower angle
restriction provided over a broader range of
wavelengths when neglecting diffuse irradiance.
With a broadband structure, efficiency increases
up to 0.8% abs for heterojunction type cells and
1.5% abs for idealized cells are predicted for optimal
cell



IEEE J. Photovoltaics, vol. 2, no. 3, pp. 303-311, July 2015 ? IEEE Journal of Photovoltaics. John Raguse; James R. Sites; Electroluminescence (EL) measurements of several CdTe solar cells



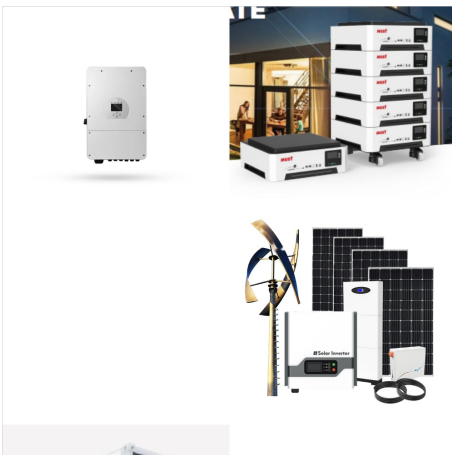
Recent improvements in light-emitting diode (LED) technology has allowed for the use of LEDs for solar simulators with excellent characteristics. In this paper, we present a solar simulator prototype fully based on LEDs. Our prototype has been designed specifically for light soaking and current-voltage (I(V)) measurements of amorphous silicon solar cells. With 11 ???



Photovoltaic (PV) arrays are threatened by lightning strikes due to the wide-open installation area. Lightning surges can not only damage the insulating structures of PV modules but also reduce the efficiency of a cell. Considering the electromagnetic coupling between the PV-cell string and the metal frame, a novel transient model of PV module is developed in this ???



Published in: IEEE Journal of Photovoltaics (Volume: 5, Issue: 5, September 2015) Article #: Page(s): 1487 - 1491. Date of Publication: 10 August 2015 . ISSN Information: Print ISSN: 2156-3381 Electronic ISSN: 2156-3403 ???



Perovskites are promising next-generation absorber materials for low-cost and high-efficiency solar cells. Although perovskite cells are configured similar to the classical solar cells, their operation is unique and requires development of a new physical model for characterization, optimization of the cells, and prediction of the panel performance. In this paper, we develop ???



The IEEE Journal of Photovoltaics (J-PV) is a peer-reviewed, archival publication reporting original and significant research results that advance the field of photovoltaics. Policy for Authors Publishing to IEEE Journals - IEEE requires an Open Researcher and Contributor ID (ORCID) for all authors publishing articles in IEEE journals.



462 IEEE JOURNAL OF PHOTOVOLTAICS, VOL. 5, NO. 1, JANUARY 2015 2) If there is only a concentration gradient of particles k present and no electric field, their charge current is given by Fick's law $j_{d,k} = -z k e (D \frac{dk}{dx} + \frac{k}{n} \frac{dn}{dx}) = -z k e D \frac{dk}{dx} - \frac{z k e D}{n} \frac{dn}{dx}$ For this relation, we have used the chemical potential



Change of main light-JV parameters of full 156 mm x 156 mm cells with 4 recombining edges for the different edge recombination mechanisms; inserted values denote the absolute loss for the case of



IEEE Journal of Photovoltaics Abstract: Presents a listing of the editorial board, board of governors, current staff, committee members, and/or society editors for this issue of the publication. Published in: IEEE Journal of Photovoltaics (Volume: 11, Issue: 5, September 2021)



In this paper, the corrosion mechanism behind damp heat-induced degradation of screen-printed silver front-side contacts of silicon solar cells due to the presence of acetic acid, which is known to be a decomposition product of the most common module encapsulation material ethylene vinyl acetate, is investigated. Scanning electron microscope (SEM) ???