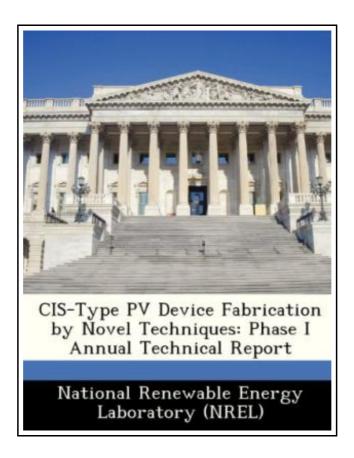
### Cis-Type Pv Device Fabrication by Novel Techniques: Phase I Annual Technical Report



Filesize: 8.38 MB

#### Reviews

I actually started off looking at this pdf. It is one of the most amazing pdf i have got read. Once you begin to read the book, it is extremely difficult to leave it before concluding.

(Milford Donnelly)

# CIS-TYPE PV DEVICE FABRICATION BY NOVEL TECHNIQUES: PHASE I ANNUAL TECHNICAL REPORT



Bibliogov, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. The present project was specifically geared toward developing a low-cost, non-vacuum particle deposition method for CIS-type absorber growth. There are four major processing steps in this technique: i) preparation of a starting powder containing all or some of the chemical species constituting CIS, ii) preparation of an ink using the starting powder, iii) deposition of the ink on a substrate in the form of a thin precursor layer, and iv) conversion of the precursor layer into a fused photovoltaic absorber through annealing steps. During this Phase I program, ISET worked on tasks that were geared toward the following goals: i) elimination of back-contact problems, ii) growth of large-bandgap absorbers, and iii) fabrication of mini-modules. As a result of the Phase I research, a Mo back-contact structure was developed that eliminated problems that resulted in poor mechanical integrity of the absorber layers. Sulfur inclusion into CIS films through high-temperature sulfurization in H2S gas was also studied. It was determined that S diffusion was a strong function of the stoichiometry of the CIS layer. Sulfur was found to diffuse rapidly through the Cu-rich films, whereas the diffusion constant was at least three orders of magnitude smaller in Cu-poor layers. Additionally, S profiles in sulfurized CIS films were correlated with the distribution of the grain size through the film. Absorbers containing large concentrations of Ga near the Mo contact interface also had large S content in that same region due to the small grain size of the Ga-containing material. New work on monolithic integration procedures overcame the problem of low shunt resistance and yielded CuIn(S, Se)2 (CISS) mini-modules of about 64-cm2 area with close to 7 percent efficiency.

- Read Cis-Type Pv Device Fabrication by Novel Techniques: Phase I Annual Technical Report Online
- Download PDF Cis-Type Pv Device Fabrication by Novel Techniques: Phase I Annual Technical Report

#### Other Books



### Weebies Family Halloween Night English Language: English Language British Full Colour

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Children s Weebies Family Halloween Night Book 20 starts to teach Pre-School and...

Download Book »



#### It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em, Greg Behrendt, Amiira Ruotola-Behrendt, A fabulous new guide to dating...

Download Book »



## Summer the 25th anniversary of the equation (Keigo Higashino shocking new work! Lies and true Impenetrable(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date: Unknown in Publisher: Modern Publishing Basic information Original Price: 28.00 yuan...

Download Book »



### You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most

Sourcebooks, Inc. Paperback / softback. Book Condition: new. BRAND NEW, You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most, Patricia Hermes, Thirteen-year-old Sarah Morrow doesn't think much of the...

Download Book »



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications.

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. This historic book may have numerous typos and missing text. Purchasers can usually...

Download Book »