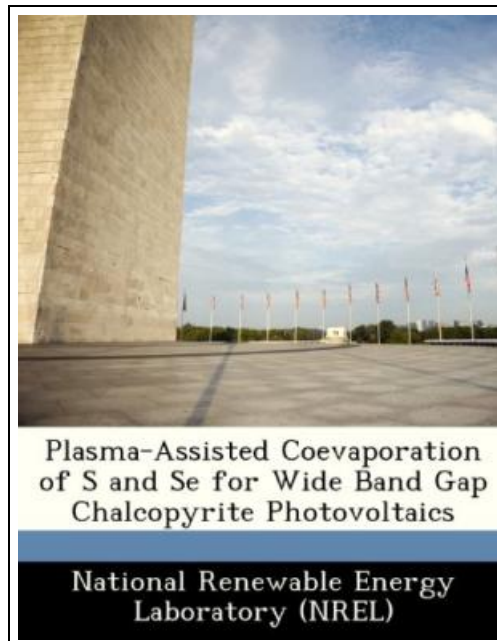


Plasma-Assisted Coevaporation of S and Se for Wide Band Gap Chalcopyrite Photovoltaics



Filesize: 2.51 MB

Reviews

This publication will never be effortless to begin on studying but extremely entertaining to learn. It is probably the most incredible publication i have go through. I realized this ebook from my i and dad suggested this publication to learn.
(Austin O'Connell)

PLASMA-ASSISTED COEVAPORATION OF S AND SE FOR WIDE BAND GAP CHALCOPYRITE PHOTOVOLTAICS

[DOWNLOAD](#)

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 26 pages. Dimensions: 9.4in. x 7.5in. x 0.2in. In this work, ITN Energy Systems (ITN) and lower-tier subcontractor Colorado School of Mines (CSM) explore the replacement of the molecular chalcogen precursors during deposition (e. g. , Se₂ or H₂Se) with more reactive chalcogen monomers or radicals (e. g. , Se). Molecular species are converted to atomic species in a low-pressure inductively coupled plasma (ICP). Tasks of the proposed program center on development and validation of monatomic chalcogen chemistry, tuning of low-pressure monomer chalcogen sources, and evaluation of plasma-assisted co-evaporation (PACE) for CIGS co-evaporation. Likely advantages of deposition by plasma-enhanced co-evaporation include: (1) Providing potential for lower deposition temperature and/or for better film quality at higher deposition temperature. (2) Providing potential for decreased deposition times. (3) Providing high material utilization efficiency (90) that results in less deposition on other parts of the reactor, leading to lower clean up and maintenance costs, as well as longer equipment lifetime. High material utilization efficiency also reduces the total operating pressure, which is beneficial for the design and control of metal co-evaporation. Advantages include minimal metal-vapor beam spread and lower source operating temperatures. (4) Enabling deposition of wide-bandgap copper indium gallium disulfur-selenide (CIGSS) films with controlled stoichiometry. University researchers at CSM are developing and testing the fundamental chemistry and engineering principles. Industrial researchers at ITN are adapting PACE technology to CIGSS co-evaporation and validating PACE process for fabrication of thin-film photovoltaics. In₂Se₃ films, which are used as precursor layers in high-efficiency CIGS depositions, were used this year as the first test case for examining the advantages of PACE listed above. Gradually, the investigation is being extended to the complete high-efficiency three-stage co-evaporation process. This item ships from La Vergne, TN. Paperback.

[Read Plasma-Assisted Coevaporation of S and Se for Wide Band Gap Chalcopyrite Photovoltaics Online](#)[Download PDF Plasma-Assisted Coevaporation of S and Se for Wide Band Gap Chalcopyrite Photovoltaics](#)

Relevant PDFs



Bully, the Bullied, and the Not-So Innocent Bystander: From Preschool to High School and Beyond: Breaking the Cycle of Violence and Creating More Deeply Caring Communities

HarperCollins Publishers Inc, United States, 2016. Paperback. Book Condition: New. Reprint. 203 x 135 mm. Language: English . Brand New Book. An international bestseller, Barbara Coloroso s groundbreaking and trusted guide on bullying-including cyberbullying-arms parents...

[Save Document »](#)



Children s Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer

Createspace, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book ***** Print on Demand *****.The Children s Handwriting Book of Alphabets and Numbers provides extensive focus on...

[Save Document »](#)



Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel s System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers

Rarebooksclub.com, United States, 2012. 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 download...

[Save Document »](#)



Children s and Young Adult Literature Database -- Access Card

Pearson Education (US), United States, 2012. Online resource. Book Condition: New. 175 x 124 mm. Language: English . Brand New Book. Pearson s Children s and Young Adult Literature Database This searchable database of over...

[Save Document »](#)



Preventing Childhood Eating Problems : A Practical, Positive Approach to Raising Kids Free of Food and Weight Conflicts

Book Condition: Brand New. Book Condition: Brand New.

[Save Document »](#)

**Pickles To Pittsburgh: Cloudy with a Chance of Meatballs 2**

Atheneum Books for Young Readers, 2000. Paperback. Book Condition: New. No Jacket. New paperback print book copy of Pickles to Pittsburgh: Cloudy with a Chance of Meatballs 2 written by Judi Barrett. Drawn by Ron

[Read ePub »](#)

**Growing Up: From Baby to Adult High Beginning Book with Online Access**

Cambridge University Press, 2014. UNK. Book Condition: New. New Book. Shipped from US within 10 to 14 business days. Established seller since 2000.

[Read ePub »](#)

**Peppa Pig: Nature Trail - Read it Yourself with Ladybird: Level 2**

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, Peppa Pig: Nature Trail - Read it Yourself with Ladybird: Level 2, Peppa Pig and her family are enjoying a nature walk when they get lost.

[Read ePub »](#)

**The Preschool Inclusion Toolbox: How to Build and Lead a High-Quality Program**

Brookes Publishing Co, United States, 2015. Paperback. Book Condition: New. 274 x 213 mm. Language: English . Brand New Book. Filled with tips, tools, and strategies, this book is the comprehensive, practical toolbox preschool administrators

[Read ePub »](#)

**Peppa Pig: Sports Day - Read it Yourself with Ladybird: Level 2**

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, Peppa Pig: Sports Day - Read it Yourself with Ladybird: Level 2, Peppa Pig is having fun with her friends at Sports Day, but she is

[Read ePub »](#)