

Innovation for Our Energy Future

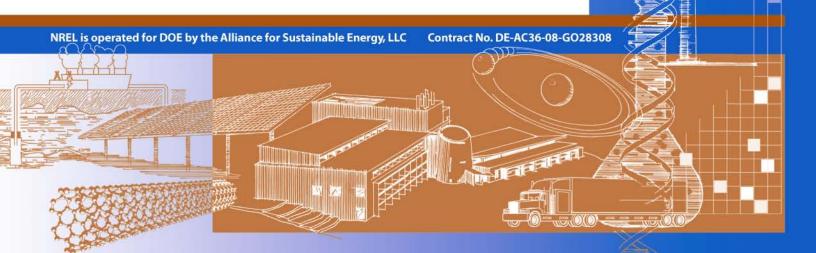
Evaluation of Novel Semiconductor Materials Potentially Useful in Solar Cells

Cooperative Research and Development Final Report

CRADA Number: CRD-06-00172

NREL Technical Contact: John Geisz (previously Sarah Kurtz)

CRADA Report NREL/TP-7A1-48404 July 2010



NOTICE

This report was prepared as an account of work sponsored by an agency of the United States government. Neither the United States government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or any agency thereof.

Available electronically at http://www.osti.gov/bridge

Available for a processing fee to U.S. Department of Energy and its contractors, in paper, from:

U.S. Department of Energy Office of Scientific and Technical Information P.O. Box 62 Oak Ridge, TN 37831-0062

phone: 865.576.8401 fax: 865.576.5728

email: mailto:reports@adonis.osti.gov

Available for sale to the public, in paper, from:

U.S. Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, VA 22161 phone: 800.553.6847

phone: 800.553.6847 fax: 703.605.6900

email: orders@ntis.fedworld.gov

online ordering: http://www.ntis.gov/ordering.htm



Printed on paper containing at least 50% wastepaper, including 20% postconsumer waste

Cooperative Research and Development Final Report

In accordance with Requirements set forth in Article XI.A(3) of the CRADA document, this document is the final CRADA report, including a list of Subject Inventions, to be forwarded to the Office of Science and Technical Information as part of the commitment to the public to demonstrate results of federally funded research.

CRADA number: CRD-06-00172

CRADA Title: Evaluation of Novel Semiconductor Materials Potentially Useful in Solar Cells

Parties to the Agreement: EpiWorks, Inc. + NREL

Abstract of CRADA work:

Evaluation of novel semiconductor materials potentially useful in solar cells. NREL will fabricate, test and analyze solar cells from EpiWorks' wafers produced in 2-3 separate growth campaigns. NREL will also characterize material from 2-3 separate EpiWorks material development campaigns. Finally, NREL will visit EpiWorks and help establish any necessary process, such as spectral CV measurements and III-V on Si metalization processes and help validate solar cell designs and performance.

Summary of Research Results:

Five batches of III-V solar cells were processed and measured for various projects at Epiworks.

Subject Inventions listing:

No inventions resulted from this CRADA.

Report Date: 3/5/10

Responsible Technical Contact at Alliance/NREL: Kurtz, Sarah R.

This document contains NO confidential, protectable, or proprietary information.

1