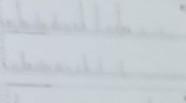


Analysis

Initial cultures were determined and
modulation fatty acids in each culture
and biomass (18:3). These profiles
and/or *Chlamydomonas* at the stage



Conclusions

Parameters for the isolation and
at consortia to use as raw-materials in
and algal strains.
which allows the isolation and
al partners in these communities.
growth of a model algal strain were
a rationally constructed microbial
by thin pure algal cultures.
in seven times under our conditions, we
recommending the dominant types

Future Direction

It's regions of algal variation is to progress
on before and after exposure to biomass
work, both at immobilizing carbon, storage
acid content samples to further testing to
direct production.
between bacterial and algal strains to see
whether if algal growth/lipid productivity
and by a specific set of type of bacterial ex-
growth enhancement by bacterial strains
systems, providing complementary metabolic
both, or some combination of these possible

Acknowledgements

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Abstract

A large scale in vivo high throughput screen was performed
lipid accumulation in the model organism *Chlamydomonas*
compositional, were selected for gene expression analysis of
each component. Samples were collected after 72h of treatment
degraded accumulation to up to 6 fold and does not severely
isolated and sequenced on Illumina HiSeq 1000. The exper-
genome using TopHat and assembled as transcriptome
successfully assembled genes. 796, 508 and 1079 genes
treated with compound 39, 43 and 84, respectively.
among treatment and control. Pathway analysis
lipid biosynthesis related pathways. Downstream
regulation of ER protein processing and
regulation of de novo, but via recycling
oxidative stressors that promote
compared to control.

Use of *Chlamydomonas reinhardtii* Treated with Lipids Inducing Small Molecules

Nishikant Wase, Paul N. Black, Concetta C. DiRusso
Chemistry, University of Nebraska, 1901 Vine Street, Lincoln, NE 68588-0300
Email: blu2@unl.edu

Results

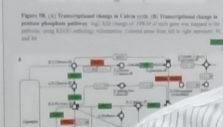
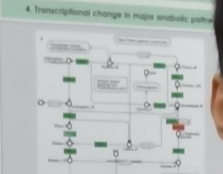
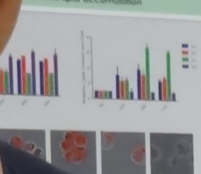


Figure 1B. (A) Transcriptional change in C18:1 n-7 fatty acid. (B) Transcriptional change in major metabolic pathways.

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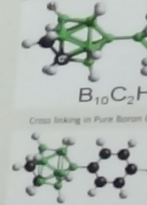
Improving K-Dielectric Semiconductors Neutr

Ethiyal Raj Wilson^a, E. Echeverria^a, G. P.
^aDepartment of Chemistry and Biochemistry, 1000 North 14th Street, University of Nebraska-Lincoln, NE 68583-0800
^bDepartment of Chemistry, 1000 North 14th Street, University of Nebraska-Lincoln, NE 68583-0800

Introduction

K-dielectric boron carbide has a number of possible
forms, some porous, some not. NASA envisioned in 2011
to build deep space probes to explore the outer
solar system and beyond. There are problems,
the probes cannot be powered by solar
panels to be protected from high neutron
radiation source. Our work on boron-carbide
solution to both of these
problems is to build a
neutron-resistant boron-carbide

Four types of boron carbide were made
boron carbide film.



Cross linking in Pure Boron Carbide
Cross linking in Boron Carbide/Benzene
Benzene
films was created through plasma
exposure. CVD, curves were created
individually. The CVD curves use
the current in the (IV) curves to
the reverse bias gradient was calcu-

Boron Carbide

Boron Carbide

Boron Carbide

Boron Carbide

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Boron Carbide

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