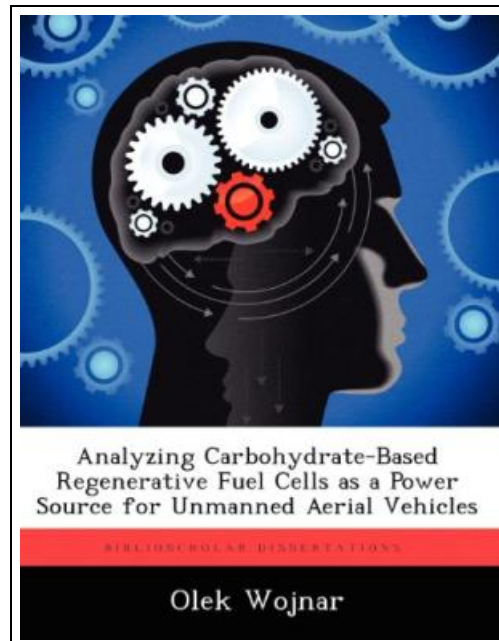


Analyzing Carbohydrate-Based Regenerative Fuel Cells as a Power Source for Unmanned Aerial Vehicles (Paperback)



Filesize: 4.66 MB

Reviews

Thorough information! Its this type of great go through. It is amongst the most incredible publication i actually have read through. It is extremely difficult to leave it before concluding, once you begin to read the book.
(*Germaine Welch*)

ANALYZING CARBOHYDRATE-BASED REGENERATIVE FUEL CELLS AS A POWER SOURCE FOR UNMANNED AERIAL VEHICLES (PAPERBACK)

DOWNLOAD



Biblioscholar, United States, 2012. Paperback. Condition: New. Language: English . Brand New Book. Based on current capabilities, we examine the feasibility of creating a carbohydratebased regenerative fuel cell (CRFC) as the primary power source for unmanned aerial vehicles (UAV) for long endurance missions where station keeping is required. A CRFC power system is based on a closed-loop construct where carbohydrates are generated from zooxanthellae, algae that create excess carbohydrates during photosynthesis. The carbohydrates are then fed to a carbohydrate fuel cell where electric power is generated for the UAV s propulsion, flight control, payload, and accessory systems. The waste products from the fuel cell are used by the zooxanthellae to create more carbohydrates, therefore mass is conserved in the process of power generation. The overall goal of this research is to determine if CRFCs should be explored further as a viable power source. Through simulations, a UAV is sized to determine if greater than 24 hour endurance flight is possible and these results are compared to UAVs using more traditional photocell based power systems. The initial results suggest that more research should be done in the development of CRFCs as a power system for long endurance UAVs. The final outcome of this research is to identify the most important areas for more detailed followon work in designing a production-ready CRFC power system for long endurance UAVs.



[Read Analyzing Carbohydrate-Based Regenerative Fuel Cells as a Power Source for Unmanned Aerial Vehicles \(Paperback\) Online](#)



[Download PDF Analyzing Carbohydrate-Based Regenerative Fuel Cells as a Power Source for Unmanned Aerial Vehicles \(Paperback\)](#)

Other Kindle Books



Journey in Shades: Poetry in Light and Dark

GB Publishing.org, United Kingdom, 2013. Paperback. Book Condition: New. 203 x 127 mm. Language: English . Brand New Book ***** Print on Demand *****.Surrey Life magazine, May 2015, TV presenter Juliette Foster: She writes with...

[Read](#) [ePub](#)

»



A Tale of Two Lesbians

Createspace, United States, 2015. Paperback. Book Condition: New. 203 x 127 mm. Language: English . Brand New Book ***** Print on Demand *****.Lucy Winters was an orphan since her parents passed away the year before...

[Read](#) [ePub](#)

»



Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success

Brookes Publishing Co. Paperback. Book Condition: new. BRAND NEW, Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success, Eva M. Horn, Susan B. Palmer, Gretchen D. Butera, Joan A. Lieber, How...

[Read](#) [ePub](#)

»



Instrumentation and Control Systems

Elsevier Science & Technology. Paperback. Book Condition: new. BRAND NEW PRINT ON DEMAND., Instrumentation and Control Systems, William Bolton, In a clear and readable style, Bill Bolton addresses the basic principles of modern instrumentation and...

[Read](#) [ePub](#)

»



Kindle Fire Tips And Tricks How To Unlock The True Power Inside Your Kindle Fire

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 52 pages. Dimensions: 9.0in. x 6.0in. x 0.1in.Still finding it getting your way around your Kindle Fire Wish you had...

[Read](#) [ePub](#)

»

**The Mystery at Draculas Castle: Transylvania, Romania**

Around the World in 80 Mysteries. Paperback. Book Condition: New. Paperback. 133 pages. Dimensions: 7.3in. x 5.1in. x 0.9in. When you purchase the Library Bound mystery you will receive FREE online eBook access! Carole Marsh Mystery

[Read Book](#)

»

**Lans Plant Readers Clubhouse Level 1**

Barron's Educational Series. Paperback. Book Condition: New. Paperback. 24 pages. Dimensions: 8.9in. x 5.7in. x 0.3in. This is volume six, Reading Level 1, in a comprehensive program (Levels 1 and 2) for beginning readers. Two nine-book sets

[Read Book](#)

»

**Readers Clubhouse Set B Safe Streets**

Barron's Educational Series, United States, 2006. Paperback. Book Condition: New. 231 x 147 mm. Language: English . Brand New Book. This is volume eight, Reading Level 2, in a comprehensive program (Reading Levels 1

[Read Book](#)

»

**The Mystery on Alaskas Iditarod Trail Real Kids, Real Places**

Gallopade International. Paperback. Book Condition: New. Paperback. 150 pages. Dimensions: 7.3in. x 5.2in. x 0.5in. When you purchase the Library Bound mystery you will receive FREE online eBook access! Carole Marsh Mystery Online eBooks are an

[Read Book](#)

»

**Readers Clubhouse Set B What Do You Say**

Barron's Educational Series, United States, 2006. Paperback. Book Condition: New. Ann Losa (illustrator). 142 x 13 mm. Language: English . Brand New Book. This is volume six, Reading Level 2, in a comprehensive program

[Read Book](#)

»