Bypassing Roadblocks to Technical Information

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Microalgae as biodiesel & biomass feedstocks: Review & analysis of the biochemistry, energetics & economics
PJB Williams, LML Laurens - Energy & Environmental Science, 2010 - pubsc.org
Following scrutiny of present biofuels, algae are seriously considered as feedstocks for next-generation biofuels production. Their high productivity and the associated high lipid yields make them attractive options. In this review, we analyse a number aspects of large-scale ...
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APS Chauhan, AK Sarna - Biomass and Bioenergy, 2013 - Elsevier
Abstract Refined Jatropha curcas L. oil (JCO) and methanol were used as the reactants for the transesterification reactions in a Radleys reactor in the presence of a heterogeneous ash catalyst derived from the waste aquatic plant Lemma perpusilla Torrey. Physical ...
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Microalgae for biodiesel production and other applications: a review
TM Mata, AA Martins, NS Caetano - Renewable and Sustainable Energy, 2010 - Elsevier
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One-Step Conversion of Algal Biomass to Biodiesel with Formation of an Algal Char as Potential Fertilizer
EA Johnson, Z Liu, E Salmon, PG Hatcher - Advanced Biofuels and ... 2013 - Springer
Abstract We describe a new procedure for conversion of algal biomass into biodiesel using a single step process through the use of tetramethylammonium hydroxide (TMAH). The dried algae is placed in a laboratory-scale reactor with TMAH reagent (25% in methanol) under ...
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Biodiesel production, properties, and feedstocks
BR Moser - Biofuels, 2011 - Springer
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2011

- Electromagnetic-Thermal Analysis Study Based on HFSS. ANSYS Link. Mahmoud E. Sabbagh

- Voice Commands to Control Recording Sessions. J. Marty Goddard

- Rank-Based Outlier Detection. H. Huang, Kishan Mehrotra, and Chilukuri Mohan

- Outlier detection using modified-ranks and other variants. Huaming Huang, Kishan Mehrotra, and Chilukuri K. Mohan

- A new cohesion metric and restructuring technique for collect oriented paradigms. Mehmet Kaya and Jim Fawcett

- The Common Information for N Dependent Random Variables. Wei Liu and Gu Xu

- Performance Limit of Image Segmentation Algorithm. Renbin Peng and P. K. Varshney


- Performance Limit of Image Segmentation Algorithm. Renbin Peng and Pranod Varshney
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SYR-EECS-2012-02

April 3, 2012

Single Eye or Camera with Depth Perception

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ABSTRACT: An imager that can measure the distance from each pixel to the point on the object that is in focus at the pixel is described here. This is accomplished by the use of short lightguide sections combined with each pixel light sensor. In the eye the rods and cones are the fiber like lightguide sections. The lens selects the object point whose range is to be determined at the particular pixel. The lens reproduces the light pattern of the object point at the image point with the addition of a phase proportional to the distance from object point to image point. This is the input to the photoconducting lightguide. The light guide has contacts along its length. The total oscillating photo current is an exponential function of the product of the range times the loss coefficient, times the ratio of the group velocity of the lightguide to the velocity of light, times the range.

KEYWORDS: Range, Three-Dimensional Vision, Imaging, Passive LIDAR, LIDAR
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PERFORMANCE OF SIMILAR DESIGNS IN THE UNITED STATES

There are very few mini-roundabouts constructed in the United States that have all the desirable design recommendations. More importantly, no mini-roundabouts in the US operate at or near capacity. One site constructed in Stevensville, Maryland conforms closely to the basic design of a mini roundabout with an ICD of 80'. Nevertheless, the central and splitter islands are not raised and have no passenger car deterrent except for flex-posts located around the central island. This site was selected to evaluate the driver behavior with regard to gap and headway decisions. Video recordings were collected using cameras that captured data from 3:45 pm to 5:45 pm. The volume for this intersection is listed in Table 1. The cameras were set 30' high on a telescopic pole shown in Figure 1.

The video data were used to collect time gaps (both accepted and rejected gaps) and follow-up time. An accepted gap is where a driver on the approach decides to move into the circulating stream as the (time) gap between vehicles is perceived sufficiently long. Rejected gaps are where a driver chooses not to move into the circulating stream as the gap is insufficient. Follow-up time is the (time) gap between the second vehicle and lead vehicle when entering the circulating stream. The driver behavior for cars and heavy vehicles were analyzed separately.

Figure 1: Data collection (left) and Google aerial photo (right) Stevensville, MD
Patents

- USPTO Application Search
- Espacenet
- Google Patents
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Dec. 26, 1967

E. E. HEADRICK

FLYING SAUCER

Filed Nov. 1, 1965

3,359,678

2 Sheets-Sheet 1
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