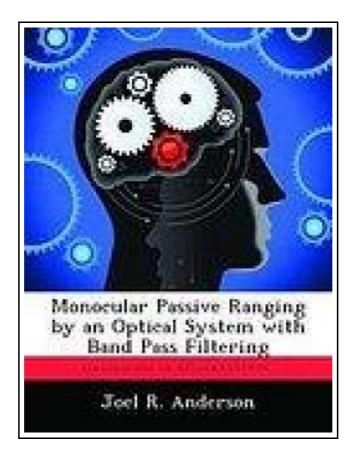
Monocular Passive Ranging by an Optical System with Band Pass Filtering



Filesize: 6.91 MB

Reviews

This publication is fantastic. It is one of the most amazing publication i have got study. I am just pleased to explain how this is actually the best pdf i have got read through in my individual lifestyle and could be he finest publication for possibly.

(Mr. Kristoffer Hills)

MONOCULAR PASSIVE RANGING BY AN OPTICAL SYSTEM WITH BAND PASS FILTERING



Biblioscholar Nov 2012, 2012. Taschenbuch. Book Condition: Neu. 246x189x4 mm. This item is printed on demand - Print on Demand Neuware - An instrument for monocular passive ranging based on atmospheric oxygen absorption near 762 nm has been designed, built and deployed to track emissive targets, including the plumes from jet engines or rockets. An intensified CCD array is coupled to variable band pass liquid crystal display filter and 3.5 - 8.8 degree field of view optics to observe the target. By recording sequential images at 7 Hz in three 6 nm width bands, the transmittance of the R-branch of the O2 (X-b) (0,0) band is determined. A metric curve for determining range from transmittance is developed using the HITRAN spectral database. A low cost system was designed and ground tested at ranges of 50 -380 m using halogen and incandescent light sources, establishing an average range error of 12%. The system was first deployed for a ground test viewing an F-16 in afterburner at ranges of 0.35 - 4.8 km, establishing a range error of 15% despite the presence of optical turbulence and a structured source spectrum. Finally, the instrument was flight tested in a C-12 imaging an F-16 in afterburner at ranges up to 11 km. The target was manually tracked, and pointing jitter limited image interpretation. A study of range error as a function of signal-to-noise ratio produced superior results to previous methods using Fourier Transform Spectroscopy. However, increased signal relative to background scatter will be required for accurate ranging for these tactical air-to-air scenarios. The promise for improved instrument performance is discussed. 72 pp. Englisch.

- Read Monocular Passive Ranging by an Optical System with Band Pass Filtering Online
- Download PDF Monocular Passive Ranging by an Optical System with Band Pass Filtering

Related Books



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

Save ePub »



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

Save ePub »



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications. (Paperback)

Rarebooksclub.com, United States, 2013. 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 usually...

Save ePub »



Sport is Fun (Red B) NF

Pearson Education Limited. Paperback. Book Condition: new. BRAND NEW, Sport is Fun (Red B) NF, Dianne Irving, This title is part of Pearson's Bug Club - the first whole-school reading programme that joins books and...

Save ePub »



Tinga Tinga Tales: Why Lion Roars - Read it Yourself with Ladybird

Paperback. Book Condition: New. Not Signed; This is a Tinga Tinga tale inspired by traditional stories from Africa. Lion is king of Tinga Tinga but he can't roar! Can his friend Flea help Lion to...

Save ePub »