COMPENDIUM

Biology

Science Centric | RSS feeds Tuesday, 9 December 2008

SC BLOG

Environment



ART & STYLE

Google Custom Search

GO

Newsletter | Today's news (78)

Physics Chemistry Geology and palaeontology

Where am I? > Home > News > Technology

TRAVEL

Tags: diffraction, technique

NEWS

HOME

Scientists design a technique to differentiate between original and bootleg **CDs**

Science Centric | 6 December 2008 11:56 GMT —

AmScope Microscope, 2000+

Stereo, Zoom, Digital, Compound & Inspection Microscopes 888-950-2888

50 Hotels in Granada

Compare hotels and save up to 75%! Save time, book at Booking.com

www.booking.com/Hotels-Granada

Optical System Design

ZEMAX: Powerful, Accurate Software for Optical System Design

www.zemax.com

Science 2.0

ResearchGATE is the fastest growing scientific network. Join now!

www.ResearchGATE.net

Ads by Google

A group of scientists of the University of Granada has developed a new optical technique which permits to know if a Compact Disc (CD) is original or a copy. This new technique is economical, fast and effective, and allows to detect illegal CD copies.

Optical CDs are at present the most extended physical means of distribution of digital information around the world. However, bootlegging in this sector is a serious problem which involves important economic losses and which has not been solved up to now.

Original CDs are made by printing, through a process which is profitable for large print runs. However, copies are obtained by performing a series of marks on the surface through the 'burning' with laser of commercial recorders on an organic material with which a series of spiral grooves are made in a blank CD.

Through the new technique proposed by the scientists of the Department of Optics of the UGR it is possible to identify if a CD has been recorded using a method or a device different to those used in industrial processes, which allows to differentiate between original CDs and copies. This technique uses the phenomenon of light diffraction on a CD surface to appreciate the differences between original and bootleg CDs, as they generate different types of diffraction models.

This technique has also been tested in DVDs, where it has also been validated, and they intend to develop it for the detection of bootleg CDs for latest generation devices such as Blue-Ray or HD-DVD.

Source: Universidad de Granada

75 Hotels in Granada

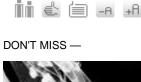
Book your hotel in Granada online Find your hotel on a city map! www.Booking.com/Granada

Laboratory Consultants

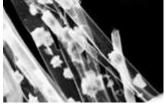
University, Industry & Government Research Facilities Design www.rfd.com

v v

Ads by Google



Astronomy Health



New hybrid nanostructures detect nanoscale magnetism A key challenge of nanotechnology research is investigating how different materials behave at lengths of merely one-billionth...



Computers determine when to stop searches at sea — [19 Nov] — British researchers are developing a new computer model to predict how long someone will survive when lost at sea, which...



Findings suggest nanowires ideal for electronics manufacturing — [14 Nov] — Researchers have discovered that tiny structures called silicon nanowires might be ideal for manufacturing in future computers...



New generator produces AC current by stretching wires -Nov] — Researchers have developed a new type of smallscale electric power generator able to produce alternating current through...



Advertise here

LATEST

MOST E-MAILED

ARCHIVE

Dissertation work led to world-leading wave

Mould toxins more prevalent and hazardous than thought

New hybrid nanostructures detect nanoscale magnetism

Rivers of gas flow around stars in new space image DOE Joint Genome Institute completes

soybean genome Late Neanderthals and modern human

contact in Iberia 'Mars Webcam' offline for low-bit-rate season

CT scans reveal that dinosaurs were airheads

Isopora or isn't it?

Stress relief: Lab mice that exercise control may be more normal

When less is more: Brief inhibition of cancer target is effective and less toxic

Genetic signature predicts outcome of paediatric liver cancer

More recent stories...

Cumulative radiation exposure shows increased cancer risk for emergency department patients

Dye-coated glass to channel energy into solar cells

Intestinal bacteria promote - and prevent! inflammatory bowel disease

Scientists discover how rheumatoid arthritis causes bone loss

The upside to allergies: Cancer prevention Protein on 'speed' linked to ADHD Fish scales show ocean fate of Atlantic salmon

Common bronchodilator linked to increased deaths

Mast cells play a role in assisting immune system to combat tularaemia

Joint replacement may improve osteoarthritis symptoms in older adults

Solar eclipse on Friday, 1 August Major discovery from MIT primed to unleash solar revolution

<u>— [|| ||| || |V V V| V|| V||| || || || X X X| X||</u>

Latest on Science Centric's News

HEADLINES —

VIDEOS -

Dissertation work led to world-leading wave power

Tycho Brahe's 1572 supernova classified — One of the most famous supernovae in the history of astronomy,

