Terahertz and Mid Infrared Radiation: Detection of Explosives and CBRN (Using Terahertz) (Paperback)



Filesize: 7.66 MB

Reviews

Comprehensive guide for pdf fanatics. It is filled with knowledge and wisdom It is extremely difficult to leave it before concluding, once you begin to read the book.

(Valentin Thompson)

TERAHERTZ AND MID INFRARED RADIATION: DETECTION OF EXPLOSIVES AND CBRN (USING TERAHERTZ) (PAPERBACK)



Springer, Netherlands, 2014. Paperback. Condition: New. 2014 ed.. Language: English . Brand New Book. The reader will find here a timely update on new THz sources and detection schemes as well as concrete applications to the detection of Explosives and CBRN. Included is a method to identify hidden RDX-based explosives (pure and plastic ones) in the frequency domain study by Fourier Transformation, which has been complemented by the demonstration of improvement of the quality of the images captured commercially available THz passive cameras. The presented examples show large potential for the detection of small hidden objects at long distances (6-10 m). Complementing the results in the short-wavelength range, laser spectroscopy with a mid-infrared, room temperature, continuous wave, DFB laser diode and high performance DFB QCL have been demonstrated to offer excellent enabling sensor technologies for environmental monitoring, medical diagnostics, industrial and security applications. From the new source point of view a number of systems have been presented - From superconductors to semiconductors, e.g. Detection of Terahertz Waves from Superconducting Bi2Sr2CaCu2O8+Î Intrinsic Josephson Junctions. The quest for a compact room temperature THz source and the recent advances in high power mid-IR QCLs lead to the development of a semiconductor THz source based on intracavity difference frequency generation. Furthermore, alternative electrically pumped THz sources based on the high emission efficiency predicted for polaritonic states in the ultra-strong coupling regime led to the demonstration of electroluminescent devices. Finally, antipolaritons in dispersive media were discussed and different aspects of the interaction of THz radiation with biomatter were presented.

Read Terahertz and Mid Infrared Radiation: Detection of Explosives and CBRN (Using Terahertz) (Paperback)
Online

Download PDF Terahertz and Mid Infrared Radiation: Detection of Explosives and CBRN (Using Terahertz) (Paperback)

Relevant Books



Comic Illustration Book for Kids: Short Moral Stories for Kids with Dog Farts

Createspace, United States, 2013. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. This is the Black White Color Version! BONUS - Includes FREE Dog Farts...

Download Document »



Study and Master English Grade 6 Core Reader: First Additional Language

Cambridge University Press (South Africa). Paperback. Book Condition: new. BRAND NEW, Study and Master English Grade 6 Core Reader: First Additional Language, Karen Morrison, Fiona Macgregor, Daphne Paizee, Study & Master English First Additional Language...

Download Document »



TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date: 2005-09-01 Publisher: Chinese children before making Reading: All books are the...

Download Document »



TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date: 2005-09-01 Publisher: Chinese children before making Reading: All books are the...

Download Document »



TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date: 2005-09-01 Publisher: Chinese children before making Reading: All books are the...

Download Document »