

New Book Received

Microwave and Millimeter-Wave Remote Sensing for Security Applications. By Jeffrey A. Nanzer, Artech House, 2012; 372 pages. Price £109.00, ISBN 978-1-60807-172-2

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Microwave and millimeter-wave remote sensing techniques are fast becoming a necessity in many aspects of security as detection and classification of objects or intruders becomes more difficult. This groundbreaking resource offers you expert guidance in this burgeoning area. It provides you with a thorough treatment of the principles of microwave and millimeter-wave remote sensing for security applications, as well as practical coverage of the design of radiometer, radar, and imaging systems. You learn how to design active and passive sensors for intruder detection, concealed object detection, and human activity classification. This detailed book presents the fundamental concepts practitioners need to understand, including electromagnetic wave propagation in free space and in media, antenna theory, and the principles of receiver design. You find in-depth discussions on the interactions of electromagnetic waves with human tissues, the atmosphere and various building and clothing materials. This timely volume explores recently developed detection techniques, such as micro-Doppler radar signatures and correlation radiometry. The book is supported with over 200 illustrations and 1,135 equations.

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Note

1. The website for this book is: <http://www.artechhouse.com/International/Books/Microwave-and-MillimeterWave-Remote-Sensing-for-Se-1966.aspx>.

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