



Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms

By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley

Download now

Read Online 

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms

By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley

A practical and self-contained guide to the principles, techniques, models and tools of imaging spectroscopy. Bringing together material from essential physics and digital signal processing, it covers key topics such as sensor design and calibration, atmospheric inversion and model techniques, and processing and exploitation algorithms. Readers will learn how to apply the main algorithms to practical problems, how to choose the best algorithm for a particular application, and how to process and interpret hyperspectral imaging data. A wealth of additional materials accompany the book online, including example projects and data for students, and problem solutions and viewgraphs for instructors. This is an essential text for senior undergraduate and graduate students looking to learn the fundamentals of imaging spectroscopy, and an invaluable reference for scientists and engineers working in the field.

 [Download Hyperspectral Imaging Remote Sensing: Physics, Sen ...pdf](#)

 [Read Online Hyperspectral Imaging Remote Sensing: Physics, S ...pdf](#)

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms

By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley

A practical and self-contained guide to the principles, techniques, models and tools of imaging spectroscopy. Bringing together material from essential physics and digital signal processing, it covers key topics such as sensor design and calibration, atmospheric inversion and model techniques, and processing and exploitation algorithms. Readers will learn how to apply the main algorithms to practical problems, how to choose the best algorithm for a particular application, and how to process and interpret hyperspectral imaging data. A wealth of additional materials accompany the book online, including example projects and data for students, and problem solutions and viewgraphs for instructors. This is an essential text for senior undergraduate and graduate students looking to learn the fundamentals of imaging spectroscopy, and an invaluable reference for scientists and engineers working in the field.

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley **Bibliography**

- Sales Rank: #201951 in Books
- Published on: 2016-12-06
- Original language: English
- Dimensions: 9.72" h x 1.38" w x 6.85" l, .0 pounds
- Binding: Hardcover
- 706 pages

 [Download Hyperspectral Imaging Remote Sensing: Physics, Sen ...pdf](#)

 [Read Online Hyperspectral Imaging Remote Sensing: Physics, S ...pdf](#)

Download and Read Free Online Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley

Editorial Review

Review

"The authors have done a masterful job of integrating and presenting the diverse subjects that form the foundation of the field of hyperspectral imaging and applications. This comprehensive textbook will clearly become one of the standard references for all who wish to learn about both fundamentals and advanced applications in this important field."

Charles Bachmann, Rochester Institute of Technology, New York

"An extraordinarily comprehensive treatment of hyperspectral remote sensing by three of the field's noted authorities. An indispensable reference for those new to the field and for the seasoned professional."

Ronald G. Resmini, George Mason University, Virginia

About the Author

Dimitris G. Manolakis is a senior member of technical staff at the Lincoln Laboratory, Massachusetts Institute of Technology. He is the co-author of *Applied Digital Signal Processing* (Cambridge, 2011), and has taught at various institutions including Northeastern University, Boston, Boston College, Massachusetts, and Worcester Polytechnic Institute, Massachusetts. He is an IEEE Fellow, and in 2013 he received the IEEE Signal Processing Society Education Award.

Ronald B. Lockwood is a member of technical staff at the Lincoln Laboratory, Massachusetts Institute of Technology. He previously worked at the Air Force Research Laboratory where he developed imaging spectrometers for both space-based and air-borne applications. He has also developed vicarious calibration techniques in collaboration with colleagues at the University of Arizona and the NASA Goddard Space Flight Center.

Thomas W. Cooley is the Senior Scientist for Space Situational Awareness at the US Air Force Research Laboratory, and has made significant contributions to the fields of atmospheric compensation and spectral data analysis. He developed the ARTEMIS sensor program, which was successfully launched in 2009, and has published over 70 research papers.

Users Review

From reader reviews:

Carolyn Robles:

Have you spare time for the day? What do you do when you have a lot more or little spare time? Yes, you can choose the suitable activity regarding spend your time. Any person spent their particular spare time to take a move, shopping, or went to typically the Mall. How about open or perhaps read a book allowed *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms*? Maybe it is to become best activity for you. You realize beside you can spend your time together with your favorite's book, you can more intelligent than before. Do you agree with their opinion or you have different opinion?

Marjorie Thompson:

The book *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms* can give more knowledge and information about everything you want. So just why must we leave the best thing like a book *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms*? Wide variety you have a different opinion about reserve. But one aim this book can give many info for us. It is absolutely appropriate. Right now, try to closer along with your book. Knowledge or details that you take for that, you may give for each other; you are able to share all of these. Book *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms* has simple shape but the truth is know: it has great and large function for you. You can search the enormous world by wide open and read a reserve. So it is very wonderful.

Veda Howard:

What do you in relation to book? It is not important along with you? Or just adding material when you really need something to explain what you problem? How about your free time? Or are you busy man or woman? If you don't have spare time to try and do others business, it is make you feel bored faster. And you have free time? What did you do? Everybody has many questions above. They must answer that question due to the fact just their can do this. It said that about reserve. Book is familiar on every person. Yes, it is appropriate. Because start from on jardín de infancia until university need this particular *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms* to read.

William Sanchez:

Here thing why this particular *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms* are different and reputable to be yours. First of all looking at a book is good nevertheless it depends in the content of computer which is the content is as tasty as food or not. *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms* giving you information deeper since different ways, you can find any publication out there but there is no book that similar with *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms*. It gives you thrill reading journey, its open up your own eyes about the thing that will happened in the world which is might be can be happened around you. It is possible to bring everywhere like in park your car, café, or even in your approach home by train. In case you are having difficulties in bringing the imprinted book maybe the form of *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms* in e-book can be your alternate.

**Download and Read Online *Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms* By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley
#ZTV35S962NO**

Read Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley for online ebook

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley books to read online.

Online Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley ebook PDF download

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley Doc

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley Mobipocket

Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley EPub

ZTV35S962NO: Hyperspectral Imaging Remote Sensing: Physics, Sensors, and Algorithms By Dimitris G. Manolakis, Ronald B. Lockwood, Thomas W. Cooley