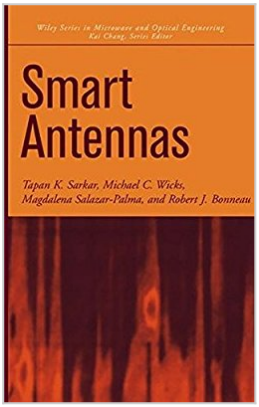

Smart Antennas

By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau

Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau

A valuable addition to the Wiley Series in Microwave and Optical Engineering Today's modern wireless mobile communications depend on adaptive "smart" antennas to provide maximum range and clarity. With the recent explosive growth of wireless applications, smart antenna technology has achieved widespread commercial and military applications.
The only book available on the topic of adaptive antennas using digital technology, this text reflects the latest developments in smart antenna technology and offers timely information on fundamentals, as well as new adaptive techniques developed by the authors. Coupling electromagnetic aspects of antenna design with signal processing techniques designed to promote accurate and efficient information exchange, the text presents various mechanisms for characterizing signal-path loss associated with signal propagation, particularly for mobile wireless communications systems based on such techniques as joint space-frequency adaptive processing.
In clear, accessible language, the authors:
* explain the difference between adaptive antennas and adaptive signal processing
* Illustrate the procedures for adaptive processing using directive elements in a conformal array
* clarify multistage analysis procedure which combines electromagnetic analysis with signal processing
* present a survey of the various models for characterizing radio wave propagation in urban and rural environments
* describe a method wherein it is possible to identify and eliminate multipath without spatial diversity
* optimize the location of base stations in a complex environment
The text is an excellent resource for researchers and engineers working in electromagnetics and signal processing who deal with performance improvement of adaptive techniques, as well as those who are concerned with the characterization of propagation channels and applications of airborne phased arrays.

Smart Antennas

By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau

Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau

A valuable addition to the Wiley Series in Microwave and Optical Engineering
Today's modern wireless mobile communications depend on adaptive "smart" antennas to provide maximum range and clarity. With the recent explosive growth of wireless applications, smart antenna technology has achieved widespread commercial and military applications.
The only book available on the topic of adaptive antennas using digital technology, this text reflects the latest developments in smart antenna technology and offers timely information on fundamentals, as well as new adaptive techniques developed by the authors. Coupling electromagnetic aspects of antenna design with signal processing techniques designed to promote accurate and efficient information exchange, the text presents various mechanisms for characterizing signal-path loss associated with signal propagation, particularly for mobile wireless communications systems based on such techniques as joint space-frequency adaptive processing.
In clear, accessible language, the authors:
* explain the difference between adaptive antennas and adaptive signal processing
* Illustrate the procedures for adaptive processing using directive elements in a conformal array
* clarify multistage analysis procedure which combines electromagnetic analysis with signal processing
* present a survey of the various models for characterizing radio wave propagation in urban and rural environments
* describe a method wherein it is possible to identify and eliminate multipath without spatial diversity
* optimize the location of base stations in a complex environment
The text is an excellent resource for researchers and engineers working in electromagnetics and signal processing who deal with performance improvement of adaptive techniques, as well as those who are concerned with the characterization of propagation channels and applications of airborne phased arrays.

Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau Bibliography

- Rank: #4187251 in Books
- Published on: 2003-05-06
- Original language: English
- Number of items: 1
- Dimensions: 9.15" h x 1.08" w x 6.28" l, 1.64 pounds
- Binding: Hardcover
- 472 pages

Editorial Review

Review
"...a high-quality book that has been written with a great deal of thought..." (*The IEE*, 15 October 2003)

From the Back Cover
A valuable addition to the Wiley Series in Microwave and Optical Engineering

Today’s modern wireless mobile communications depend on adaptive "smart" antennas to provide maximum range and clarity. With the recent explosive growth of wireless applications, smart antenna technology has achieved widespread commercial and military applications.

The only book available on the topic of adaptive antennas using digital technology, this text reflects the latest developments in smart antenna technology and offers timely information on fundamentals, as well as new adaptive techniques developed by the authors. Coupling electromagnetic aspects of antenna design with signal processing techniques designed to promote accurate and efficient information exchange, the text presents various mechanisms for characterizing signal-path loss associated with signal propagation, particularly for mobile wireless communications systems based on such techniques as joint space-frequency adaptive processing.

In clear, accessible language, the authors:

- explain the difference between adaptive antennas and adaptive signal processing
- Illustrate the procedures for adaptive processing using directive elements in a conformal array
- clarify multistage analysis procedure which combines electromagnetic analysis with signal processing
- present a survey of the various models for characterizing radio wave propagation in urban and rural environments
- describe a method wherein it is possible to identify and eliminate multipath without spatial diversity
- optimize the location of base stations in a complex environment

The text is an excellent resource for researchers and engineers working in electromagnetics and signal processing who deal with performance improvement of adaptive techniques, as well as those who are concerned with the characterization of propagation channels and applications of airborne phased arrays.

About the Author
TAPAN K. SARKAR, PhD, received a BTech from the Indian Institute of Technology, Kharagpur, India, an MScE from the University of New Brunswick, Fredericton, Canada, and an MS and a PhD from Syracuse University in Syracuse, New York, where he is currently a professor in the Department of Electrical and Computer Engineering. He is a fellow of the IEEE.

MICHAEL C. WICKS, PhD, received undergraduate degrees from Mohawk Valley Community College and Rensselaer Polytechnic Institute, and graduate degrees from Syracuse University, all in electrical engineering. He is a Fellow of the IEEE and a member of the Association of Old Crows. Dr. Wicks is a Principal Research Engineer in the U.S. Air Force Research Laboratory in the Sensor Directorate, Radar Signal Processing Branch. He has authored over 125 papers, reports, and patents.

MAGDALENA SALAZAR-PALMA, PhD, received an Ingeniero de Telecomunicación and a PhD from the Universidad Politécnica de Madrid in Madrid, Spain, where she is a Profesor Titular in the Signals, Systems, and Radiocommunications Department at the Escuela Técnica Superiór de Ingenieros de Telecomunicación.

ROBERT J. BONNEAU, PhD, obtained his BSEE and MSEE from Cornell University and his MS and PhD from Columbia University, all in electrical engineering. He is the program manager at the Advanced Technology Office of DARPA.

Users Review

From reader reviews:

Shawn Hodgin:

Have you spare time to get a day? What do you do when you have a lot more or little spare time? Yeah, you can choose the suitable activity with regard to spend your time. Any person spent their spare time to take a walk, shopping, or went to the particular Mall. How about open or even read a book eligible Smart Antennas? Maybe it is to be best activity for you. You understand beside you can spend your time using your favorite's book, you can more intelligent than before. Do you agree with it has the opinion or you have additional opinion?

Thomas Rinaldi:

The book Smart Antennas gives you the sense of being enjoy for your spare time. You need to use to make your capable a lot more increase. Book can to get your best friend when you getting strain or having big problem with the subject. If you can make looking at a book Smart Antennas for being your habit, you can get a lot more advantages, like add your own capable, increase your knowledge about a number of or all subjects. You are able to know everything if you like open and read a e-book Smart Antennas. Kinds of book are a lot of. It means that, science reserve or encyclopedia or other folks. So , how do you think about this e-book?

Edward Brown:

Often the book Smart Antennas will bring one to the new experience of reading any book. The author style to elucidate the idea is very unique. Should you try to find new book to learn, this book very suited to you. The book Smart Antennas is much recommended to you to study. You can also get the e-book through the official web site, so you can quicker to read the book.

William Leone:

Is it an individual who having spare time in that case spend it whole day simply by watching television programs or just laying on the bed? Do you need something totally new? This Smart Antennas can be the solution, oh how comes? The new book you know. You are so out of date, spending your time by reading in this new era is common not a nerd activity. So what these publications have than the others?

Read Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau for online ebook

Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau 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 Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau books to read online.

Online Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau ebook PDF download

Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau Doc

Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau Mobipocket

Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau EPub

QC0MLS7RW3Z: Smart Antennas By T. K. Sarkar, Michael C. Wicks, M. Salazar-Palma, Robert J. Bonneau