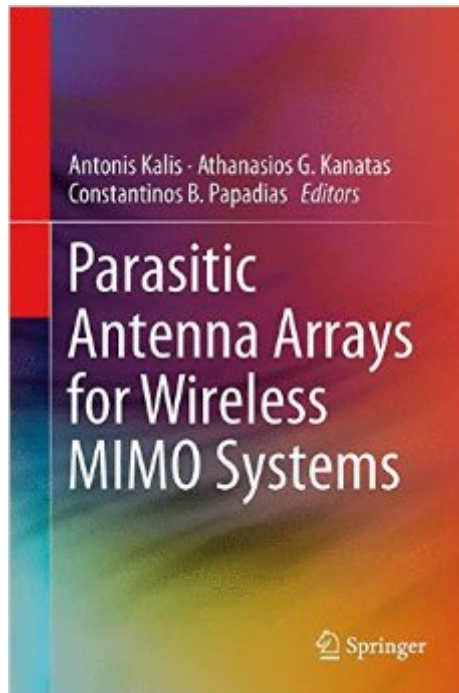


The book was found

# Parasitic Antenna Arrays For Wireless MIMO Systems



## Synopsis

This book unites two different technologies: parasitic antenna arrays driven via analogue circuits that control the electromagnetic waves generated by the antenna array; and MIMO technology for multi-antenna arrays, typically driven by digital techniques in the baseband domain. The combination of these two technologies has revealed a novel functionality that breaks through the conventional MIMO paradigm, allowing MIMO transmission over the air with the use of antenna arrays that may consist of only a single active element, that is surrounded by a number of passive neighboring antennas. The contributions in the book show the capability of such systems to also perform MIMO transmission. This fact holds the potential of revolutionizing the way small-form wireless terminals operate and seems to set the scene for a win-win situation, achieving MIMO transmission with very small and cheap antenna arrays. The book is structured to provide a well-rounded treatment of the various facets of this newly discovered wireless communication capability. All relevant technical angles, ranging from information theoretic to electromagnetic considerations; from analogue circuit to digital baseband control for signal generation; and from channel modeling to communication theoretic aspects are taken into account. A good balance between theory, practical considerations and over-the-air experimentation is proposed and reflected in the chapter outline. Finally, a discussion and early evidence related to potential applications as well as the relevance to current and upcoming wireless standards is provided.

## Book Information

Hardcover: 246 pages

Publisher: Springer; 2014 edition (October 11, 2013)

Language: English

ISBN-10: 1461479983

ISBN-13: 978-1461479987

Product Dimensions: 6.3 x 0.7 x 9.2 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,868,826 in Books (See Top 100 in Books) #120 in Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Antennas #434 in Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Microwaves #738 in Books > Science & Math > Physics > Electromagnetism > Electricity

[Download to continue reading...](#)

Parasitic Antenna Arrays for Wireless MIMO Systems Baseband Receiver Design for Wireless MIMO-OFDM Communications Narrowband Direction of Arrival Estimation for Antenna Arrays (Synthesis Lectures on Antennas) Antenna Arrays: A Computational Approach Hacking: Wireless Hacking, How to Hack Wireless Networks, A Step-by-Step Guide for Beginners (How to Hack, Wireless Hacking, Penetration Testing, Social ... Security, Computer Hacking, Kali Linux) Wireless Hacking: How To Hack Wireless Network (How to Hack, Wireless Hacking, Penetration Testing, Social ... Security, Computer Hacking, Kali Linux) Antenna Fundamentals- Module 4: Radio Antenna Systems - Modern Methods of Reflector Antenna Analysis and Design (Artech House Antenna Library) HDTV Antenna: Over-The-Air HDTV Antenna Instructions DAS 101 Distributed Antenna System: A Basic Guide to In-Building Wireless Infrastructure Designing and Deploying 802.11 Wireless Networks: A Practical Guide to Implementing 802.11n and 802.11ac Wireless Networks For Enterprise-Based Applications (2nd Edition) (Networking Technology) Controller-Based Wireless LAN Fundamentals: An end-to-end reference guide to design, deploy, manage, and secure 802.11 wireless networks Hacking Exposed Wireless: Wireless Security Secrets & Colutions Hacking Exposed Wireless, Third Edition: Wireless Security Secrets & Solutions Parasitic and Infectious Diseases: Epidemiology and Ecology Control of Human Parasitic Diseases, Volume 61 (Advances in Parasitology) The Immunology of Parasitic Infections: A Handbook for Physicians, Veterinarians, and Biologists Digital Signal Processing with Field Programmable Gate Arrays (Signals and Communication Technology) Substrate Integrated Antennas and Arrays Antennas and Propagation for Wireless Communication Systems: 2nd Edition

[Dmca](#)