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Seeing Invisible
Advanced Antenna Arrays

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This book provides a simple explanation of existing antenna arrays, their advances and limitations. It will lead you to nature-inspired next generation antenna array design and their advances.

Why antenna arrays ? Because antennas or antenna arrays are the primary element in any sensory system or circuit. Any artificial intellect, computer, vision, communication, or detection system cannot work properly without a properly designed sensor system or antenna array. They include not only technical areas like communication, navigation and radars, but also health care, medical imaging and even amateur metal detectors and RC vehicle design.

Taking into account today's military and geo-political threats, the book will also help you understand the functional needs of the new generation of antenna arrays for various radar and anti-missile systems to meet those threats. It also covers the evolution of antennas and antenna array design and gives insight into the fundamental function and advances of nature inspired new generation, fly eye antenna arrays and their applications.

This book is intended for a wide area of readers and does not require special education, but it is a valuable resource for engineers and technicians who are involved in the design and development of all space communication and navigation systems, and drones, and hypersonic missiles detection systems, with special emphasis on interference immunity and protection. It also can be used as a textbook in advanced radar technology coursework and seminars.
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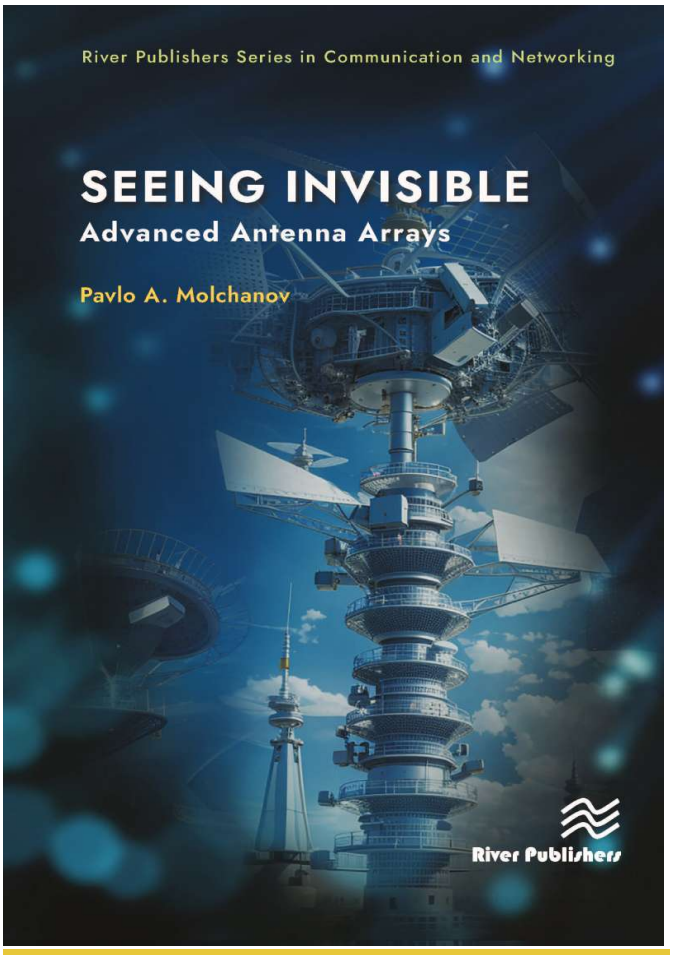

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