This book is intended as an advanced text for courses in antennas, with a focus on the mature but vital background field of aperture antennas. The book is aimed at final year, MSc, PhD and Post-Doctoral students, as well as readers who are moving from academia into industry, beginning careers as wireless engineers, system designers, in R&D, or for practising engineers.

It assumes the reader has undertaken an earlier course of study on Maxwell's equations, fields and waves. Some of these topics are summarised in the early few chapters in order to provide continuity and background for the remaining chapters. The aperture antennas covered include the main types of horns, reflectors and arrays as well as microstrip patches, reflectarrays and lenses. To provide more than a superficial treatment of arrays, the topic of mutual coupling is covered in greater detail than most similar books in the area. Also included is an introduction to arrays on non-planar surfaces, which is of importance for applications that involve curved surfaces such as in aerodynamics or for making aperture antennas unobtrusive. A chapter is included on some modern aperture antennas to illustrate design techniques beyond the most common types of aperture antennas described in the early chapters. This is to show where advances have recently been made and where they could be improved in the future. Also included are selected topics of a practical nature for aperture antennas, namely fabrication and measurement.
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