

Preface

Over the last 10 years there has been a lot of exciting development in the photonics of metallic wire structures. The concept and the physics involved are quite simple. Yet this message is usually obscured and not explained and emphasized. In this book we try to present our point of view on how these phenomena can be understood in a simple way without carrying out detailed numerical calculations every time. It turns out that the method presented here also provides for a very efficient algorithm for dealing with electromagnetic waves in these structures. We have tried to make the book simple enough so that it will be useful for non-specialists in other fields to enter into this area. This book is intended for a general audience in both physics and engineering. To include the possibility of using this as a textbook, we have provided detailed derivations of different formulae. We have tried to make the book self-contained by providing enough background information so that it is not necessary to chase through different sources to understand and follow the development of the ideas and the derivation of the formulae.

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