


[DOWNLOAD](#)


Electromagnetics and Calculation of Fields

By Ida, Nathan / Bastos, Joao P. A.

Book Condition: New. Publisher/Verlag: Springer, Berlin | This introduction to electromagnetic fields emphasizes the computation of fields and the development of theoretical relations. It presents the electromagnetic field and Maxwell's equations with a view toward connecting the disparate applications to the underlying relations, along with computational methods of solving the equations. | The Electromagnetic Field and Maxwell's Equations.- 1. Mathematical Preliminaries.- 1.1. Introduction.- 1.2. The Vector Notation.- 1.3. Vector Derivation.- 1.3.1. The Nabla (?) Operator.- 1.3.2. Definition of the Gradient, Divergence, and Curl.- 1.4. The Gradient.- 1.4.1. Example of Gradient.- 1.5. The Divergence.- 1.5.1. Definition of Flux.- 1.5.2. The Divergence Theorem.- 1.5.3. Conservative Flux.- 1.5.4. Example of Divergence.- 1.6. The Curl.- 1.6.1. Circulation of a Vector.- 1.6.2. Stokes's Theorem.- 1.6.3. Example of Curl.- 1.7. Second Order Operators.- 1.8. Application of Operators to More than One Function.- 1.9. Expressions in Cylindrical and Spherical Coordinates.- 2. The Electromagnetic Field and Maxwell's Equations.- 2.1. Introduction.- 2.2. Maxwell's Equations.- 2.2.1. Fundamental Physical Principles of the Electromagnetic Field.- 2.2.2. Point Form of the Equations.- 2.2.3. The Equations in Vacuum.- 2.2.4. The Equations in Media with $\epsilon \neq 0$ and $\mu \neq 0$.- 2.2.5. The Equations in General Media.- 2.2.6. The Integral Form of Maxwell's Equations.- 2.3. Approximations to Maxwell's...


[READ ONLINE](#)

Reviews

A whole new e book with a brand new standpoint. I have read through and i also am certain that i am going to planning to read again yet again later on. I found out this book from my i and dad advised this pdf to learn.

-- **Audrey Lowe I**

It is fantastic and great. It is really simplified but unexpected situations from the 50 % in the ebook. I discovered this ebook from my dad and i suggested this book to learn.

-- **Dr. Luna Skiles**