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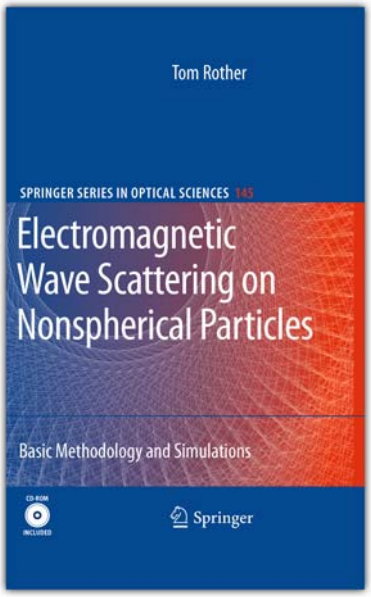
Electromagnetic Wave Scattering on Nonspherical Particles – Basic Methodology and Simulations. Springer Series in Optical Sciences, 2009, XIV, 294 p, Springer, ISBN 978-3-642-00703-3, Hardcover



This book gives a detailed overview of the theory of electromagnetic wave scattering on single, homogeneous, but nonspherical particles. A related Green's function formalism is systematically developed which provides a powerful mathematical basis not only for the development of numerical approaches but also to discuss those general aspects like symmetry, unitarity, and the validity of Rayleigh's hypothesis. Example simulations are performed in order to demonstrate the usefulness of the developed formalism as well as to introduce the simulation software which is provided on a CD-ROM with the book.

Table of Contents

1) Scattering as a Boundary Value Problem
2) Filling the Mathematical Tool Box
3) First Approach to the Green Functions: The Rayleigh Method
4) Second Approach to the Green Functions: The Self-Consistent Way
5) Other Solution Methods
6) The Rayleigh Hypothesis
7) Physical Basics of Electromagnetic Wave Scattering
8) Numerical Simulations of Scattering Experiments
9) Recommended Literature