Record Nr. UNINA9910450899503321 Modeling and Computations in Electromagnetics [[electronic resource]] **Titolo** : A Volume Dedicated to Jean-Claude Nédélec / / edited by Habib Ammari Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2008 **ISBN** 1-281-17943-4 9786611179434 3-540-73778-2 [1st ed. 2008.] Edizione Descrizione fisica 1 online resource (240 p.) Lecture Notes in Computational Science and Engineering, , 1439-7358; Collana ; 59 537.01/5118 Disciplina 539.20113 Soggetti Mechanical engineering Computers Computer mathematics **Optics** Electrodynamics Computational intelligence Mathematical physics Mechanical Engineering Theory of Computation Computational Mathematics and Numerical Analysis Classical Electrodynamics Computational Intelligence Theoretical, Mathematical and Computational Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa

Description based upon print version of record.

Stabilized FEM–BEM Coupling for Maxwell Transmission Problems -- A Posteriori Error Analysis and Adaptive Finite Element Methods for Electromagnetic and Acoustic Problems -- Time Domain Adaptive Integral Method for Surface Integral Equations -- Local and Nonlocal

Livello bibliografico

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Note generali

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Sommario/riassunto

Nonreflecting Boundary Conditions for Electromagnetic Scattering --High-Order Methods for High-Frequency Scattering Applications --Recent Studies on Inverse Medium Scattering Problems -- Time Reversal of Electromagnetic Waves -- Addition Theorem.

Modeling and computations in electromagnetics is a quite novel and growing discipline, expanding as a result of the steadily increasing demand for designing electrical devices, modeling electromagnetic materials, and simulating electromagnetic fields in nanoscale structures. The aim of this volume is to bring together prominent worldwide experts to review state-of-the-art developments and future trends of modeling and computations in electromagnetics. This volume is devoted to merging the expertise of scientists working in this dynamic discipline, and to raising interest for challenging issues. The most significant advances in computational techniques have been made only in the last few years, and several challenging technological applications are presented in this volume.