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Descrizione fisica	1 online resource (367 p.)
Collana	Wiley series in microwave and optical engineering ; ; 214
Altri autori (Persone)	SarkarTapan (Tapan K.)
Disciplina	537.01/5118 537.015118
Soggetti	Electromagnetism - Data processing Electromagnetic fields - Mathematical models Electromagnetic waves - Mathematical models Parallel processing (Electronic computers) Integral domains Time-domain analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	In-core and out-of-core LU factorization for solving a matrix equation -- A parallel MoM code using RWG basis functions and ScaLAPACK-based in-core and out-of-core solvers -- A parallel MoM code using higher-order basis functions and ScaLAPACK-based in-core and out-of-core solvers -- Tuning the performance of a parallel integral equation solver -- Refinement of the solution using the iterative conjugate gradient method -- A parallel MoM code using higher-order basis functions and PLAPACK-based in-core and out-of-core solvers -- Applications of the parallel frequency-domain integral equation solver : TIDES.
Sommario/riassunto	A step-by-step guide to parallelizing cem codes The future of

computational electromagnetics is changing drastically as the new generation of computer chips evolves from single-core to multi-core. The burden now falls on software programmers to revamp existing codes and add new functionality to enable computational codes to run efficiently on this new generation of multi-core CPUs.

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