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Altri autori (Persone)	DularPatrick MeunierGerard PiriouFrancis
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Nota di contenuto	Cover; CONTENTS; EDITORIAL ADVISORY BOARD; Preface; What do voltmeters measure?; Electromagnetic torque calculation using magnetic network methods; Comparison between torque calculation methods in a non-conforming movement interface; Coupling of finite formulation with integral techniques; Numerical solutions in primal and dual meshes of magnetostatic problems solved with the finite integration technique; Identification of ferromagnetic thin sheets magnetization; A t0-fsurface impedance formulation for multiply connected conductors Subdomain perturbation finite element method for skin and proximity effects in inductorsCoupling of analytical and numerical methods for the electromagnetic simulation of permanent magnet synchronous machines; On the use of PML for the computation of leaky modes; Investigation of the characteristics of conformal microstrip antennas; Adaptive time integration for electromagnetic models with sinusoidal

excitation; Computational methods for modeling of complex sources; Fundamental investigation of 3D optimal design of open type magnetic circuit producing uniform field
Design of a double-sided tubular permanent-magnet linear synchronous generator for wave-energy conversionMagnetic shielding of buried high-voltage (HV) cables by conductive metal plates; Improved AC-resistance of multiple foil windings by varying foil thickness of successive layers; Influence of the magnetic model accuracy on the optimal design of a car alternator; Modeling of a beam structure with piezoelectric materials: introduction to SSD techniques; 3D micromagnetismmagnetostatic coupling technique for MR reading heads modeling
Analysis of the stray magnetic field created by faulty electrical machinesAnalysis of the structure-dynamic behaviour of an induction machine with balancing kerfs; Wound magnetic core consequences on false residual currents; Limits and rules of use of a dynamic flux tube model; Finite element formalism for micromagnetism; A 3D electric vector potential formulation for dynamic hysteresis and losses; New discretisation scheme based on splines for volume integral method; Hybridization of volumetric and surface models for the computation of the T/R EC probe response due to a thin opening flaw
Simple and direct calculation of capacitive sensor sensitivity maph- and b-conform finite element perturbation techniques for nondestructive eddy current testing

Sommario/riassunto

The purpose of the EMF Symposium is to throw a bridge between the recent advances of research in numerical modeling of electromagnetic fields and the growing number of industrial problems requiring such techniques. Therefore, beside classical sessions on the progress of computational methods, special sessions were devoted to advanced industrial applications of electromagnetic modeling. The topics included numerical methods and techniques, coupled problems (mechanical, thermal, electric circuits), material modeling, optimization and specific application oriented numerical problems.