

1. Record Nr.	UNINA9910715642303321
Titolo	Message from the President of the United States, transmitting, in compliance with a resolution of the Senate, information in relation to the sales and donations of public lots in the City of Washington. December 14, 1840. Read, and ordered to be printed
Pubbl/distr/stampa	[Washington, D.C.] : , : [publisher not identified], , 1840
Descrizione fisica	1 online resource (16 pages) : tables
Collana	Senate document / 26th Congress, 2nd session. Senate ; ; no. 5 [United States congressional serial set] ; ; [serial no. 375]
Altri autori (Persone)	Van BurenMartin <1782-1862.>
Soggetti	Revenue Factory and trade waste Government contractors Improvements (Law) Land grants Public contracts Public land sales Public lands Sanitation Financial statements Valuation Legislative materials.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Batch processed record: Metadata reviewed, not verified. Some fields updated by batch processes. FDLP item number not assigned.

2. Record Nr.	UNINA9910829809003321
Autore	Poljak D (Dragan)
Titolo	Advanced modeling in computational electromagnetic compatibility [[electronic resource] /] / Dragan Poljak
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2007
ISBN	1-280-82227-9 9786610822270 0-470-11688-9 0-470-11687-0
Descrizione fisica	1 online resource (516 p.)
Disciplina	621.38224
Soggetti	Electromagnetic compatibility - Mathematical models Electromagnetic compatibility - Data processing
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	ADVANCED MODELING IN COMPUTATIONAL ELECTROMAGNETIC COMPATIBILITY; CONTENTS; PREFACE; PART I: FUNDAMENTAL CONCEPTS IN COMPUTATIONAL ELECTROMAGNETIC COMPATIBILITY; 1. Introduction to Computational Electromagnetics and Electromagnetic Compatibility; 1.1 Historical Note on Modeling in Electromagnetics; 1.2 Electromagnetic Compatibility and Electromagnetic Interference; 1.2.1 EMC Computational Models and Solution Methods; 1.2.2 Classification of EMC Models; 1.2.3 Summary Remarks on EMC Modeling; 1.3 References; 2. Fundamentals of Electromagnetic Theory; 2.1 Differential Form of Maxwell Equations 2.2 Integral Form of Maxwell Equations 2.3 Maxwell Equations for Moving Media; 2.4 The Continuity Equation; 2.5 Ohm's Law; 2.6 Conservation Law in the Electromagnetic Field; 2.7 The Electromagnetic Wave Equations; 2.8 Boundary Relationships for Discontinuities in Material Properties; 2.9 The Electromagnetic Potentials; 2.10 Boundary Relationships for Potential Functions; 2.11 Potential Wave Equations; 2.11.1 Coulomb Gauge; 2.11.2 Diffusion Gauge; 2.11.3 Lorentz Gauge; 2.12 Retarded Potentials; 2.13 General Boundary Conditions and Uniqueness Theorem; 2.14 Electric and Magnetic Walls

2.15 The Lagrangian Form of Electromagnetic Field Laws 2.15.1 Lagrangian Formulation and Hamilton Variational Principle; 2.15.2 Lagrangian Formulation and Hamilton Variational Principle in Electromagnetics; 2.16 Complex Phasor Notation of Time-Harmonic Electromagnetic Fields; 2.16.1 Poynting Theorem for Complex Phasors; 2.16.2 Complex Phasor Form of Electromagnetic Wave Equations; 2.16.3 The Retarded Potentials for the Time-Harmonic Fields; 2.17 Transmission Line Theory; 2.17.1 Field Coupling Using Transmission Line Models
2.17.2 Derivation of Telegrapher's Equation for the Two-Wire Transmission Line 2.18 Plane Wave Propagation; 2.19 Radiation; 2.19.1 Radiation Mechanism; 2.19.2 Hertzian Dipole; 2.19.3 Fundamental Antenna Parameters; 2.19.4 Linear Antennas; 2.20 References; 3 Introduction to Numerical Methods in Electromagnetics; 3.1 Analytical Versus Numerical Methods; 3.1.1 Frequency and Time Domain Modeling; 3.2 Overview of Numerical Methods: Domain, Boundary, and Source Simulation; 3.2.1 Modeling of Problems via the Domain Methods: FDM and FEM
3.2.2 Modeling of Problems via the BEM: Direct and Indirect Approach 3.3 The Finite Difference Method; 3.3.1 One-Dimensional FDM; 3.3.2 Two-Dimensional FDM; 3.4 The Finite Element Method; 3.4.1 Basic Concepts of FEM; 3.4.2 One-Dimensional FEM; 3.4.3 Two-Dimensional FEM; 3.5 The Boundary Element Method; 3.5.1 Integral Equation Formulation; 3.5.2 Boundary Element Discretization; 3.5.3 Computational Example for 2D Static Problem; 3.6 References; 4 Static Field Analysis; 4.1 Electrostatic Fields; 4.2 Magnetostatic Fields; 4.3 Modeling of Static Field Problems
4.3.1 Integral Equations in Electrostatics Using Sources

Sommario/riassunto

This text combines the fundamentals of electromagnetics with numerical modeling to tackle a broad range of current electromagnetic compatibility (EMC) problems, including problems with lightning, transmission lines, and grounding systems. It sets forth a solid foundation in the basics before advancing to specialized topics, and allows readers to develop their own EMC computational models for applications in both research and industry.
