A review of important recent developments in full-wave CEM for RF and microwave engineering

Hybrid frequency domain methods: from analysis to design applications

Higher order finite models

Unconditionally stable finite-difference time-domain methods and their applications

Simulation and design of 3D geometric RF IC inductors by novel modeling techniques with MAGPEEC plus FASTCAP

A new analysis of electromagnetic scattering from two-dimensional electromagnetic band-gap structures

Stable and accurate solution of time-domain electric field integral equation

Eddy currents in a gradient coil, modelled as circular loops of strips

Rigorous scattering-matrix method for the analysis of electromagnetic wave propagation in photonic crystal waveguides

Analysis of the electromagnetic behavior of an infinite slot aperture through Wiener-Hopf technique

A deductive method for antenna near-field computation in EMC prediction

A parabolic wave equation approach for modeling propagation through Windows

Analysis of dielectric frequency selective surfaces using the FDTD method

A new coupled MLPG-FE method for electromagnetic field computations

Condition numbers for higher order vector FEM matrices

Designing cylindrical filtering circuits with the unconditionally stable ADI-FDTD method

FDTD modelling of Lorentzian DNG meta-materials with the Z-transform

Effects of shield on railgun inductance gradient

Investigations on solving electromagnetic scattering by characteristic basis function method

Simulations of photonic-crystal slabs by a frequency-dependent FDTD formulation

The applications of complementary finite element method to the calculation of electromagnetic parameters

A novel method for designing slotted coaxial antennas to achieve uniform coupling loss

Simulation of scattering from soil surfaces using single integral equation and two-grid scheme

Application of caustic correction in estimation of radar cross-section

Scattering of a Gaussian beam by a spherical dielectric object using the vectorial Gaussian beam tracing method

A new method for estimating rain attenuation at high frequencies

A generalized least squares registration algorithm with earth-centered earth-fixed (ECEF) coordinate system

A modified exact maximum likelihood registration algorithm

Mesh free methods for periodic structures

Electromagnetic modeling of arbitrary composite PEC object with fast multipole method

Parallel multilevel fast multipole method for solving large scale electromagnetic problems
Computing the RCS of dielectric coated objects using multilevel fast multipole algorithm

Parallel MLFMA computation base on MPI

On the order and complexity of higher order MLFMA for 3D electromagnetic scattering

On the complexity and accuracy of MLFMA for 3D electromagnetic scattering

Fast algorithms of slight signal decomposition and reconstruction

Applying AWE to higher order vector FE-BI method for calculating input impedance of patch antenna

Simulation of locally inhomogeneous multilayer planar structure by hybrid method

Techniques for reducing the effects of detent force in PMLSMs

Analysis of impacts of various RAM on RCS of 3-D complex targets using the FEM-FMA

Scattering by large, complex, composite targets using hybrid FE/BI/MLFMA

Preliminary research of the reconfigurable antenna based on genetic algorithms

Genetic optimization of an aperture-coupled microstrip patch antenna

Adaptive population disappear of genetic algorithm and its application

Sensitivity analysis in genetic design of wire antennas

Association rules data mining in manufacturing information system based on genetic algorithms

A new hybrid genetical-swarm algorithm for electromagnetic optimization

Optimal excitations of LPDA arrays with network theories

New adaptive beamforming algorithms for smart antennas in DS-CDMA mobile communications systems

A novel UWB abnormal monopole antenna

Design of a compact and wideband microstrip antenna array

A study of compact ultra-wideband microstrip antennas operating over the K, KA and millimeter wave bands using Sierpinski gasket patches

Simple mathematical mapping based meshing technique with application to antenna simulations

Development of ESPAR antenna array using numerical modelling techniques

Conical-beam horizontally polarized cross-slot-antenna

Antenna design for catheter-based tissue heating

Research on the influence of cylindrical dielectric capsulation on dipole antenna

Design of dual-polarized microstrip patch antennas with excellent polarization purity

Multi-band antenna design using multi-objective evolutionary algorithm

The radiation characteristics of the reflector antenna with random holes on the surface

An untitled edge-slotted waveguide antenna array design

Flat type UWB antenna

A type of element characters for circularly polarized microstrip phased arrays

Full wave analysis and design of a photonic crystal substrate patch antenna

The analysis of polarization at satellite earth mobile station
Design and analysis of a dual band antenna for small LEO satellite applications
Microstrip array antenna for suppression of cross polarization
Equivalent transmission lines and application to antenna
Simulation and experiments on back-fed coplanar patch antennas
A semi-analytical method to calculate the resonance frequency in asymmetric TEM cell

Modeling and parameters of grounding circuit for conducted EMI
Calculation for transient radiation field from metallic enclosure of GIS based on vector fitting and recursive convolution
On the modeling of arbitrary composite metallic and dielectric structures based on surface integral equation
The simulation of electromagnetic pulse coupling with computer box
Influence of interphase interference on resistive leakage current of MOA
Influence of power system's harmonic voltage on on-line leakage current monitoring of MOA
EMC computer modelling techniques for CPU heat sink simulation
Resistive fencing technique for multi-layer PCB power bus radiation mitigation
Coupling effects of high power microwave
Introducing the transfer function concept for a complex structure due to electromagnetic wave penetration using FDTD method
Prediction of RF radiation from a PCB enclosed in a metallic box with an aperture

Subspace semi-blind weighted equalization over frequency selective rayleigh slow fading channels
Effects of channel estimation in adaptive loading gain of OFDM
Online adaptive nonlinear channel equalization using RBF Nerutal networks
Study of a high-speed OQPSK module with direct modulation mode in RF
A novel high-speed NLA-16SQAM modulation module
Optimal design and simulation for multi-rate symbol timing recovery in software radio QPSK demodulation
The design of an efficient satellite IF PLL PM demodulator with low complexity
Fully digital asynchronous symbol timing recovery in digital receiver
Blind channel equalization and identification over frequency selective slow fading channels
Design of the phase-lock loop for wide band CDMA transmitter
Monte Carlo simulation approach in the lost-call simulation in LAN
Circuit design for the mini-type data communication equipment
Design of CMOS RF front-end for multi-standard receiver
A new chirp-coded radar waveform
The estimation for 2-D direction of arrival based on higher-order cumulant of signals received by circle array
Research on the underwater laser fuze target detecting technique
Bearing measurements association algorithm in passive location system
Three-dimensional passive location algorithm of the OTHT
Study on target detection technique of chaos-based modulation
UWB impulse distance detector
Automatic target detection using a dynamic learning neural network
Tracking initiation and data association of multi-target passive tracking based on information fusion
A novel design of radar vehicle detector based on DSP
The look weighing and mosaic of subimages of spaceborne ScanSAR
An image registration algorithm for DBS and optical images
Improvement of non-linear chirp scaling algorithm
External calibration of the CRS-1 satellite
L-band SAR-processor for the Chinese SAR
A study on active jamming to synthetic aperture radar
Effect of mutual coupling on the scattering property of finite dipole array
Image reconstruction for a perfectly conducting cylinder buried in a three-layer structure by TE wave illumination
Time domain inverse scattering analysis of stratified Lossy media using a forward-backward time-stepping method
Edge detection based on regulated morphological gradient
Analysis of ECG R waves using adaptive wavelets transforms with fuzzy-logic
Application of chaos analytic methods based on normal EEG
The quasioptical terahertz molecular spectra generator of atmosphere gases radiation
A spatial-temporal model for the propagation of abnormal oscillations in a 2-D excitable neural tissue
Wrist-located pulse detection using IR reflection due to pulse added volume of arterial blood
A method for determination, analysis and visualization of high frequency electromagnetic field influence on human
Pre-harvest annihilation of Sunne-Pest in winters using electromagnetic exposure
Accurate high-speed propagation prediction method based on measurement
Reflection analysis of the end-facet dielectric slab waveguide by FDTD method
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Antenna temperature deterioration of aperture calibration due to millimeter wave radiometer non-linearity
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Microstrip filters on high resistivity SI substrate
Analysis of T-shaped defected ground structure (DGS) using closed-form expressions

DDC design by using FPGA in HF OSMAR system

Interconnect power consumption analysis for MCM based on S-domain RLC transmission line model

An efficient FPGA design for lifting wavelet

Preliminary research on target detection in first-order peaks with adaptive cancellation

Subsurface imaging of buried objects from FDTD modeled scattered field

Multiresolution wavelet decomposition to merge landsat TM and SPOT panchromatic data

Analysis and reduction of detent force in permanent magnet linear synchronous motor

A mini single-port instruction cache and its priority strategy for load-store conflict in a general purpose DSP

Implementation conditional access system for pay TV based on JavaCard

The method research for reconstructing the modulation spectrum of radiant noises based on iterative algorithm

Digital watermark technique based on speech signal

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