

# THE APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY

## JOURNAL

### SPECIAL ISSUE ON ACES 2003 CONFERENCE

Part II

Front/Back Matter

March 2004

### TABLE OF CONTENTS

“Use of Model-Based Parameter Estimation for Fast RCS Computation of a Conducting Body of Revolution over a Frequency Band” H. Son, J. R. Mautz, and E. Arvas.....	65
“Triangular Grids: A Review of Resonator and Waveguide Analysis with Classical FIT and Some Reflections of Yee-like FIT- and FEM-Schemes” U. v Rienen.....	73
“Envelope – Finite Element (EVFE) Technique in Electromagnetics with Perfectly Matched Layer (PML)” W. Yao, Y. Wang, and T. Itoh.....	84
“Applications of the Transmission Line Matrix Method to Microwave Scanning Microscopy” R. Ciocan and N. Ida.....	94
“A Novel 3D Pseudo-Spectral Analysis of Photonic Crystal Slabs” K. Varis and A. R. Baghai-Wadji.....	101
“A Hybrid Full MAS and Combined MAS/TSA Algorithm for Electromagnetic Induction Sensing” F. Shubitidze, K. O’Neill, K. Sun, I. Shamatava, and K. D. Paulsen.....	112
“A Novel Dirichlet-Neumann Random-Walk Algorithm for the Solution of Time-Harmonic Helmholtz Equation at Multiple Wavelength Length Scales: 1D and 2D Verification” K. Chatterjee, P. Matos, and Y. L. Le Coz.....	127
“A Novel Numerical Approach for the Analysis of 2D MEMS-Based Variable Capacitors Including the Effect of Arbitrary Motions ” M. Kuroda, N. Miura, and M. M. Tentzeris.....	133
“Coupling Between Highly Conducting and Permeable Metallic Objects in the EMI Frequency Range” F. Shubitidze, K. O’Neill, I. Shamatava, and K. Sun.....	139

“Numerical Study of Coupling between Coagulators and Electrodes of Cardiac Pacemakers under Consideration of the Human Body”	
M. Schick and F. M. Landstorfer.....	149
“Correlation Between the Geometrical Characteristics and Dielectric Polarizability of Polyhedra”	
A. Sihvola, P. Ylä-Oijala, S. Järvenpää, and J. Avelin.....	156