

ISSN: 1942-0730 Vol. 4, No. 5, May 2012



Journal of Electromagnetic Analysis and Applications



www.scirp.org/journal/jemaa

JOURNAL EDITORIAL BOARD

ISSN: 1942-0730 (Print) 1942-0749 (Online)

<http://www.scirp.org/journal/jemaa>

Editors-in-Chief

Prof. James L. Drewniak Missouri-Rolla University, USA

Prof. Yuanzhang Sun Wuhan University, China

Editorial Advisory Board

Prof. C. C. Chan University of Hong Kong, China

Prof. Ryuichi Yokoyama Waseda University, Japan

Prof. Xiaoxin Zhou Chinese Society of Electrical Engineering (CSEE), China

Editorial Board

Dr. Leonardo M. Angelone Food and Drug Administration, USA

Prof. Vladimir N. Binhi Russian Academy of Sciences, Russia

Dr. Boguslaw Butrylo Bialystok Technical University, Poland

Prof. Mohamed H. Gaber Cairo University, Egypt

Prof. Kerim Guney Nuh Naci Yazgan University, Turkey

Dr. Yuchun Guo Jiangnan Electronic Communication Research Institute, China

Prof. Xijiang Han Harbin Institute of Technology, China

Dr. Eisuke Hanada Shimane University Hospital, Japan

Dr. Isabel Jesus Institute of Engineering of Porto, Portugal

Prof. Yonghua Song Tsinghua University, China

Prof. Francisco Torrens Universitat of Valencia, Spain

Prof. Uygun V. Valiev Mirzo Ulugbek National University of Uzbekistan (NUUz), Uzbekistan

Dr. Wenhua Yu Pennsylvania State University, USA

Prof. Zeev Zalevsky Bar-Ilan University, Israel

TABLE OF CONTENTS

Volume 4 Number 5

May 2012

Optimal Design of Wideband Microwave Absorber Consisting of Resistive Meta-Surface Layers S. N. Zhou, Z. B. Wang, Y. J. Feng.....	187
Simulation of Modes of Ionosphere Alfvén Resonator with High Quality Factors in the Case of Oblique Geomagnetic Field V. Grimalsky, S. Koshevaya, A. Kotsarenko, M. A. C. Chavez.....	192
Preliminary Report on the Indoor Electromagnetic Radiation in a Municipality of Western P.R. China: Up-to-Now Still within the Range T. T. Fu, Y. Chen, L. L. Han, Q. Z. Qin.....	199
Rectangular Microstrip Antenna on Ridge Ground Plane to Control the Resonant Modes for Improved Bandwidth using Transverse Resonance Method S. K. Ghosh, A. Ghosh, D. Ghosh, S. Chattopadhyay, S. Banerjee.....	206
Novel Method of Detecting Thyroid Dysfunction Using Microwaves A. Lonappan.....	212
Review of the Book “Magneto-optical Spectroscopy of the Rare-Earth Compounds: Development and Application” I. S. Edelman.....	216

Journal of Electromagnetic Analysis and Applications (JEMAA)

Journal Information

SUBSCRIPTIONS

The *Journal of Electromagnetic Analysis and Applications* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$59 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright©2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

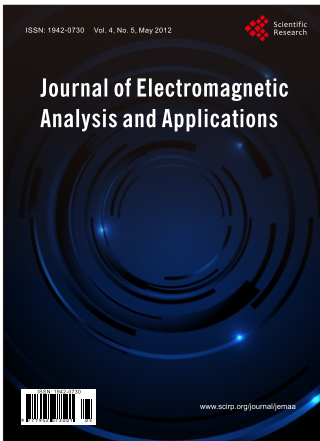
Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jemaa@scirp.org



Journal of Electromagnetic Analysis and Applications

ISSN: 1942-0730 (Print), 1942-0749 (Online)

www.scirp.org/journal/jemaa

Journal of Electromagnetic Analysis and Applications (JEMAA) is a professional journal in the field of electromagnetic analysis, testing and application. The goal of this journal is to provide an international platform for engineers and academicians all over the world to promote, share, and discuss various new issues and developments in the field of electromagnetics. This journal is edited to encourage deeper understanding and greater effectiveness in theory analysis, testing, numerical calculation and engineering application that relevant electromagnetic fields.

Editors-in-Chief

Prof. James L. Drewniak
Prof. Yuanzhang Sun

Missouri-Rolla University, USA
Wuhan University, China

Subject Coverage

JEMAA publishes four categories of original technical reports: papers, communications, reviews, and discussions. Papers are well-documented final reports of research projects. Communications are shorter and contain noteworthy items of technical interest or ideas required rapid publication. Reviews are synoptic papers on a subject of general interest, with ample literature references, and written for readers with widely varying background. Discussions on published reports, with author rebuttals, form the fourth category of JEMAA publications. Topics of interest include, but are not limited to:

- Antenna Arrays
- Antenna Theory and Applications
- Biological Effects
- Eddy Current Problems
- Electrical Machine
- Electric Power and Grounding (Earth)
- Electric Power Line
- Electrocardiograph (ECG)
- Electroencephalograph (EEG)
- Electromagnetic Breaker
- Electromagnetic Compatibility
- Electromagnetic Compatibility and Electromagnetic Environment
- Electromagnetic Compatibility (EMC)
- Electromagnetic Devices
- Electromagnetic Field Theory
- Electromagnetic Interferences (EMI)
- Electromagnetic Inverse Problems
- Electromagnetic Launch
- Electromagnetic Material Modelling
- Electromagnetic Measurement Technology and Instruments
- Electromagnetic Nondestructive Testing
- Electromagnetic Numerical Analysis
- Electromagnetic Physics
- Electromagnetic Solid Mechanics
- Electromagnetic Structure Optimization
- Electromagnetism and Biological Tissues
- Electromagnetism and Medical Devices
- Electromagnetism in Medical Applications
- Electromyography
- Environmental Pollution by Electromagnetics
- Fiber Optics
- High Frequency Techniques
- Integrated Optics
- Magnetic Fluid
- Measuring Technique of Radiated Electromagnetic
- Medical Applications
- Moving Conductor Eddy Current Problems
- Multiphysics Coupled Problems
- Noise and Signals
- Noise Reduction
- Optical and Millimeter Wave Techniques
- Printed Circuits
- Quasi-Static Fields
- Radar Measurements and Applications
- Radiated Electromagnetic
- Scattering and Diffraction
- Serges (Thunderbolts or Static Electricity)
- Solid State Devices and Circuits
- Static Fields
- Static Magnetic
- Test Electromagnetic Analysis Method (Team) Workshop Benchmark Problems
- The Problems of the Propagation of Electromagnetic Waves
- Waveguides

Notes for Intending Authors

Submitted papers should not be previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers will be peer reviewed. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/jemaa>

E-mail: jemaa@scirp.org