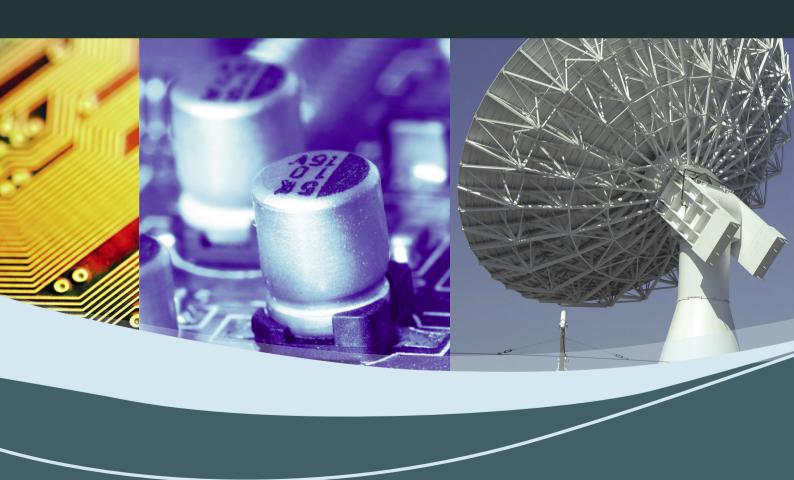
ISSN: 1759-0787

INTERNATIONAL JOURNAL OF

MICROWAVE AND WIRELESS TECHNOLOGIES

cambridge.org/mrf







INTERNATIONAL JOURNAL OF

MICROWAVE AND WIRELESS TECHNOLOGIES

EDITOR-IN-CHIEF

Prof. Francisco Medina-Mena,

Professor of Electromagnetism Department of Electronics & Electromagnetism University of Sevilla Av. Reina Mercedes s/n 41012-Seville, Spain medina@us.es

EDITORIAL BOARD

Prof. Luigi Boccia, University of Calabria, Italy

Prof. Paolo Colantonio, Università di Tor Vergata Roma, Italy

Prof. Wenjie Feng, South China University of Technology, China

Prof. Philippe Ferrari, IMEP Grenoble, France

Prof. Gaspare Galati, Università di Tor Vergata Roma, Italy

Prof. Alessandro Galli, Sapienza University of Rome, Italy

Prof. Antonio García-Pino, University of Vigo, Spain

Prof. Anthony Ghiotto, IMS Laboratory, Talence, France

Prof. J. Sebastián Gómez-Diaz, UC Davis, USA

Prof. Shiban K Koul, Indian Institute of Technology Delhi, India

Prof. Krzysztof S Kulpa, Warsaw University of Technology, Poland

Prof. Asher Madjar, M2Microwaves LLC, Philadelphia, USA and Tel Aviv University, Israel

Prof. Giuseppina Monti, University of Salento, Italy

Dr. Steve Nightingale, Cobham, UK **Prof. Marco Pasian,** University of Pavia, Italy

Prof. Dimitra Psychogiou, University College Cork and Tyndall National Institute, Ireland

Dr. Xianming Qing, Institute for Infocomm Research, Singapore

Prof. Ruediger Quay, Fraunhofer Institute Freiburg, Germany

Prof. Raymond Quéré, XLIM-University of Limoges, France.

Dr. Fred Schindler, RFMD, USA

Prof. Dominique Schreurs, KU Leuwen, Belgium

Prof. Almudena Suárez, Universidad de Cantabria, Spain

Prof. Luciano Tarricone, University of Salento, Italy

Prof. Huei Wang, NTU, Taiwan **Prof. Hung-Wei Wu,** Feng Chia University, Taiwan

Prof. Felix Yanovsky, National Aviation University, Ukraine

Prof. Haoshen Zhu, South China University of Technology, China

Scope of the journal

International Journal of Microwave and Wireless Technologies is interdisciplinary and application oriented, providing a platform for the microwave industry. Subjects covered include: applied electromagnetic field theory, components, analogue and mixed-signal circuits, systems, optical-microwave interactions, electromagnetic compatibility, industrial applications, biological effects and medical applications.

Submission of Manuscripts

All manuscripts should be submitted online at http://mc.manuscriptcentral.com/mrf. Please consult the instructions for authors at http://cambridge.org/mrf

Subscriptions

International Journal of Microwave and Wireless Technologies (ISSN 1759-0787) is published ten times a year in February, March, April, May, June, July, September, October, November and December. The subscription price (excluding VAT) of Volume 15 (2023) for institutional subscribers is £861 net (US \$1615 in the USA, Canada and Mexico). Members of the European Microwave Association receive free online access to the Journal. Single parts are £99 (US \$186 in the USA, Canada and Mexico). Orders, which must be accompanied by payment, may be sent to a bookseller, subscription agent or direct to the publisher: Cambridge University Press, Journals Fulfilment Dept, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK; or in the USA, Canada and Mexico: Cambridge University Press, Journals Fulfillment Department, 1 Liberty Plaza, Floor 20, New York, NY, 10006, USA. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Japanese prices for institutions are available from Kinokuniya Company Ltd, P.O. Box 55, Chitose, Tokyo 156, Japan.

Advertising

For all parts of the world except USA, Canada and Mexico to Journals Advertising: ad_sales@cambridge.org Address enquiries in the USA, Mexico and Canada only to: journals_advertising@cup.org

Copying

This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of U.S. Copyright law) subject to promotional or commercial purposes. Code 0266–4674/2018. *ISI Tear Sheet Service*, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single copies of separate articles for private use only.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions. For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

Internet Access

This journal is included in Cambridge Core and can be found at cambridge.org/mrf. For further information on other Press titles access http://www.cambridge.org

© Cambridge University Press and the European Microwave Association 2023 Cambridge University Press, UPH, Shaftesbury Road, Cambridge CB2 8BS, United Kingdom 1 Liberty Plaza, Floor 20, New York, NY, 10006, USA USA 477 Williamstown Road, Port Melbourne, VIC 3207, Australia Ruiz de Alarcón 13, 28014 Madrid, Spain Dock House, The Waterfront, Cape Town 8001, South Africa