

# Advertising Opportunities

To advertise in this journal and for details of pricing, availability and discount opportunities please contact:

## **Advertising in UK, Europe and rest of world**

The Advertising Sales Team  
Cambridge University Press  
The Edinburgh Building,  
Shaftesbury Road,  
Cambridge, UK, CB2 8RU  
Tel: +44 (0)1223 325083  
Email: [ad\\_sales@cambridge.org](mailto:ad_sales@cambridge.org)

## **Advertising in USA, Mexico and Canada**

Journals Advertising Coordinator  
32 Avenue of the Americas,  
New York,  
NY 10013-2473, USA  
Tel: +1 (212) 337 5053 Fax: +1 (212) 337 5959  
E-mail: [journals\\_advertising@cambridge.org](mailto:journals_advertising@cambridge.org)



CAMBRIDGE  
UNIVERSITY PRESS

INTERNATIONAL JOURNAL OF  
**MICROWAVE AND WIRELESS TECHNOLOGIES**

**CONTENTS**

<b>Preface</b>	1	<b>Evaluation of GaN technology in Doherty power amplifier architectures</b>	
ORIGINAL ARTICLES		Paolo Colantonio, Franco Giannini, Rocco Giofrè and Luca Piazzon	75
<b>AlGaIn/GaN epitaxy and technology</b>		<b>GaN devices for communication applications: evolution of amplifier architectures</b>	
Patrick Waltereit, Wolfgang Bronner, Rüdiger Quay, Michael Dammann, Rudolf Kiefer, Wilfried Pletschen, Stefan Müller, Rolf Aidam, Hanspeter Menner, Lutz Kirste, Klaus Köhler, Michael Mikulla and Oliver Ambacher	3	Ulf Schmid, Rolf Reber, Sébastien Chartier, Kristina Widmer, Martin Oppermann, Wolfgang Heinrich, Chafik Meliani, Rüdiger Quay and Stephan Maroldt	85
<b>Exact determination of electrical properties of wurtzite <math>Al_{1-x}In_xN/(AlN)/GaN</math> heterostructures (<math>0.07 \leq x \leq 0.21</math>) by means of a detailed charge balance equation</b>		<b>AlGaIn/GaN-based power amplifiers for mobile radio applications: a review from the system supplier's perspective</b>	
Marcus Gonschorek, Jean-Francois Carlin, Eric Feltrin, Marcel Py and Nicolas Grandjean	13	Dirk Wiegner, Gerhard Luz, Patrick Jüsckhe, Robin Machinal, Thomas Merk, Ulrich Seyfried, Wolfgang Templ, Andreas Pascht, Rüdiger Quay and Friedbert Van Raay	95
<b>Industrial GaN FET technology</b>		<b>Overview of AlGaIn/GaN HEMT technology for L- to Ku-band applications</b>	
Hervé Blanck, James R. Thorpe, Reza Behtash, Jörg Splettstößer, Peter Brückner, Sylvain Heckmann, Helmut Jung, Klaus Riepe, Franck Bourgeois, Michael Hosch, Dominik Köhn, Hermann Stieglauer, Didier Floriot, Benoît Lambert, Laurent Favede, Zineb Ouarch and Marc Camiade	21	Stéphane Piotrowicz, Erwan Morvan, Raphaël Aubry, Guillaume Callet, Eric Chartier, Christian Dua, Jérémy Dufraisse, Didier Floriot, Jean-Claude Jacquet, Olivier Jardel, Yves Mancuso, Benoît Mallet-Guy, Mourad Oualli, Zineb Ouarch, Marie-Antoinette Di-Forte Poisson, Nicolas Sarazin, Michel Stanislawiak and Sylvain Delage	105
<b>Millimeter-wave GaN-based HEMT development at ETH-Zürich</b>		<b>Design and realization of GaN RF-devices and circuits from 1 to 30 GHz</b>	
Haifeng Sun, Diego Marti, Stefano Tirelli, Andreas R. Alt, Hansruedi Benedickter and C.R. Bolognesi	33	Jutta Kühn, Markus Musser, Friedbert Van Raay, Rudolf Kiefer, Matthias Seelmann-Eggebert, Michael Mikulla, Rüdiger Quay, Thomas Rödle and Oliver Ambacher	115
<b>Reliability issues of Gallium Nitride High Electron Mobility Transistors</b>		<b>GaN for space application: almost ready for flight</b>	
Gaudenzio Meneghesso, Matteo Meneghini, Augusto Tazzoli, Nicolò Ronchi, Antonio Stocco, Alessandro Chini and Enrico Zanoni	39	Jean-Luc Muraro, Guillaume Nicolas, Do Minh Nhut, Stéphane Forestier, Stéphane Rochette, Olivier Vendier, Dominique Langrez, Jean-Louis Cazaux and Marziale Feudale	121
<b>GaN transistor characterization and modeling activities performed within the frame of the KorriGaN project</b>		<b>GaN-based amplifiers for wideband applications</b>	
Tibault Reveyrand, Walter Ciccognani, Giovanni Ghione, Olivier Jardel, Ernesto Limiti, Antonio Serino, Vittorio Camarchia, Federica Cappelluti and Raymond Quéré	51	Patrick Schuh, Hardy Sledzik, Rolf Reber, Kristina Widmer, Martin Oppermann, Markus Mußer, Matthias Seelmann-Eggebert and Rudolf Kiefer	135
<b>Large-signal modeling of large-size GaN HEMTs with a comprehensive extrinsic elements extraction algorithm</b>			
J. Alberto Zamudio-Flores, Samir Dahmani and Günter Kompfa	63		