

CONTENTS

FOREWORD	7
FAST AND NON INTRUSIVE FAILURE ANALYSIS OF BiCMOS RF-MEMS	
<i>N. TORRES MATABOSCH, F. COCCETTI, M. KAYNAK, B. ESPANA, B. TILLACK, J.L. CAZAUX</i>	<i>9</i>
DESIGN AND VALIDATION OF RF-MEMS WIDE BAND PHASE SHIFTERS IN HARSH ENVIRONMENTS	
<i>A. HARCK, P. BLONDY, S. FARGEOT, S. VILLERS</i>	<i>19</i>
MEMS-BASED ADJUSTABLE HIGH-Q E-PLANE FILTERS	
<i>F. GENTILI, V. NOCELLA, L. PELLICCIA, F. CACCIAMANI, P. FARINELLI, R. SORRENTINO</i>	<i>27</i>
AN ACCURATE EM MODELING OF 140 GHz BiCMOS EMBEDDED RF-MEMS SWITCH	
<i>S. TOLUNAY, M. WIETSTRUCK, A. GÖRITZ, M. KAYNAK, B. TILLACK</i>	<i>35</i>
FREQUENCY AND BANDWIDTH CONTROL OF SWITCHABLE ICROSTRIP BANDPASS FILTERS USING RF-MEMS OHMIC SWITCHES	
<i>Z. BRITO-BRITO, I. LLAMAS-GARRO, L. PRADELL, F. GIACOMOZZI, S. COLPO</i>	<i>43</i>
HIGH-FREQUENCY OPTIMIZATION OF BiCMOS EMBEDDED THROUGH-SILICON VIAS FOR BACKSIDE-INTEGRATED MEMS	
<i>M. WIETSTRUCK, M. KAYNAK, S. MARSCHMEYER, A. GÖRITZ, S. TOLUNAY, S. KURTH, B. TILLACK</i>	<i>53</i>
RF MEMS MODELING WITH ARTIFICIAL NEURAL NETWORKS	
<i>L. VIETZORRECK, M. MILIJIĆ, Z. MARINKOVIĆ, T. KIM, V. MARKOVIĆ, O. PRONIĆ-RANČIĆ</i>	<i>63</i>
MEMBRANE SUPPORTED D-BAND ANTENNA PROCESSED ON LOW-RESISTIVITY SILICON	
<i>A.-C. BUNEA, A. AVRAM, D. NECULOIU, C. RUSCH</i>	<i>67</i>
ANALYSIS OF RF MEMS SWITCHES WITH METAL-METAL CONTACTS	
<i>S. KURTH, S. VOIGT, A. BERTZ, S. HAAS, J. FRÖMEL, T. GESSNER, A. AKIBA, K. IKEDA</i>	<i>75</i>
LONG-TERM RELIABILITY OF RF-MEMS DIELECTRIC-LESS CAPACITIVE SWITCHES	
<i>V. MULLONI, F. GIACOMOZZI, G. RESTA, B. MARGESIN</i>	<i>81</i>

NONLINEARITY DETERMINATION AND LINEARITY DEGRADATION IN RF MEMS MULTI-DEVICE CIRCUITS	
<i>U. SHAH, M. STERNER, J. OBERHAMMER</i>	89
COMPARATIVE STUDY OF CONTACTED AND CONTACT LESS CHARGING IN RF MEMS CAPACITIVE SWITCHES	
<i>M. KOUTSOURELI, L. MICHALAS, P. MARTINS, E. PAPANDREOU, A. LEULIET, S. BANSROPUN, G. PAPAIOANNOU, A. ZIAEI</i>	99
SENSITIVITY, REPEATABILITY AND LATERAL SCANNING RESOLUTION OF MICROMACHINED NEAR-FIELD MILLIMETER-WAVE PROBE FOR SKIN CANCER DIAGNOSIS	
<i>F. TÖPFER, S. DUDOROV, J. OBERHAMMER</i>	107
DESIGN AND MULTIPHYSICS ANALYSIS OF LOW-LOSS 60-GHz SPNT RF-MEMS SWITCHES	
<i>M.W. ROUSSTIA, M.H.A.J. HERBEN</i>	117
3D MICROMACHINED Ka (30 GHz) BAND RF MEMS FILTER FOR ON-BOARD SATELLITE COMMUNICATION SYSTEMS	
<i>A.Q.A. QURESHI, L. PELLICCIA, S. COLPO, F. GIACOMOZZI, P. FARINELLI, B. MARGESIN</i>	127
CONTROLLABLE ESSENCE OF COMPLEX MATERIALS EXPLOITING TWO-HOT-ARM ELECTROTHERMAL ACTUATORS	
<i>A.X. LALAS, N.V. KANTARTZIS, T.D. TSIBOUKIS</i>	137
A CARBON NANOTUBES RIDGE GAP RESONATOR	
<i>A.M SALEEM, S. RAHIMINEJAD, V. DESMARIS, P. ENOKSSON</i>	147
DESIGN OF AN UWB ANTENNA WITH A NOVEL RECONFIGURABLE MEMS BAND NOTCH ACTUATED WITHOUT BIAS LINES	
<i>A. NEMATI, B.A. GANJI</i>	153
RESIDUAL STRESS AND SWITCHING TRANSIENT STUDIES FOR BiCMOS EMBEDDED RF MEMS SWITCH USING ADVANCED ELECTRO-MECHANICAL MODELS	
<i>A. MEHDAOUI, S. ROUVILLOIS, G. SCHRÖPFER, G. LORENZ, M. KAYNAK, M. WIETSTRUCK</i>	163