

TABLE OF CONTENTS

PREFACE AND EXECUTIVE SUMMARY	5
1. Isophoric Sparse Arrays for Satellite Communications.....	9
by O.M. Bucci, T. Isernia, A. Morabito, S. Perna and D. Pinchera	
2. Inverse problems in antenna radiation and diagnostics.....	31
by A.Brancaccio, G. Leone, M. Maisto, R. Pierri, R. Solimene	
3. Blending Electromagnetic and Information Theory in Antenna Synthesis: Theory, Applications and Perspectives.....	51
by Marco Donald Migliore	
4. Large Sparse Array Synthesis for 5th Generation (5G) Communication Systems	67
by Mario Lucido, Marco Donald Migliore, Gaetano Panariello, Daniele Pinchera, Fulvio Schettino	
5. Optimal Trade-Off Synthesis for Future Generation Phased Arrays @ ELEDIA Research Center	81
by N. Anselmi, A. Massa, G. Oliveri, L. Poli, P. Rocca, M. Salucci, A. Poli	
6. Recent Advances in Leaky-Wave Antennas: From Far-field to Near-field Applications	99
by A. Galli, P. Baccarelli, P. Burghignoli D. Comite, W. Fuscaldo	
7. Metamaterials for Radiating Structures with Enhanced Functionalities	123
by M. Barbuto, F. Bilotti, A. Marini, A. Monti, D. Ramaccia, A. Toscano, S. Vellucci	
8. Metasurface Antennas	139
by M.Faenzi, G. Minatti, David G. Ovejero, F. Caminita, E. Martini, C. Della Giovampaola and S. Maci	

9. Conformal Phased Array Diagnostic by Fast Matrix Method	161
by G. Di Massa, S. Costanzo	
10. Phaseless Antenna Diagnostics via Compressive Sensing	175
by T. Isernia, A. F. Morabito, R. Palmeri	
11. Recent developments in the Near-Field to Far-Field transformation techniques @ UNISA	183
by F. D'Agostino, F. Ferrara, C. Gennarelli, R. Guerriero, M. Migliozi	
12. Computational-enhanced antenna and platform measurements /characterization.....	199
by L. Ciorba, M. Righero, G. Giordanengo, G. Vecchi	

