Table of Contents

Dual-Lag Correlation-Based Feature Detection of OFDM Signals with Cyclic Phase Compensation Vesa Turunen, Marko Kosunen, Visa Koivunen, and Jussi Ryynanen	1
NC-OFDM Cognitive Radio Optimal Pilot Placement for the LS Estimator Boyan Soubachov and Neco Ventura	5
Cooperative jam Technique to Increase Physical-layer Security in CWSN Alvaro Araujo, Javier Blesa, Elena Romero, and Octavio Nieto-Taladriz	11
Joint Optimal Spectrum Sensing Time and Power Allocation in Ultra Wideband Cognitive Radio Networks Liaoyuan Zeng and Sean McGrath	15
CRN Survey and A Simple Sequential MAC Protocol for CRN Learning Usman Shahid Khan and Tahir Maqsood	22
Dynamic Spectrum Allocation in Low-Bandwidth Power Line Communications Kyle Kastner, Stan McClellan, and William Stapleton	28
Cognitive Wireless Sensor Networks Framework for Green Communications Design Alvaro Araujo, Elena Romero, Javier Blesa, and Octavio Nieto-Taladriz	34
Testbed for Cognitive Radio Networks Based on USRP2/N200 Modules Roman Marsalek and Demian Lekomtcev	41
Smart Noise–Linearity Breakdown in Homodyne Multi-Standard Radio Receivers Silvian Spiridon, Claudius Dan, and Mircea Bodea	46
Optimal Algorithm for Cognitive Spectrum Decision Making Ming-Xue Liao, Xiao-Xin He, and Xiao-Hong Jiang	50
Learning-based Spectrum Sensing in OFDM Cognitive Radios Muhammad Muzaffar, Mohamed Tarhuni, and Khaled Assaleh	57
Developing Cognitive Strategies for Reducing Energy Consumption in Wireless Sensor Networks Elena Romero, Alvaro Araujo, Javier Blesa, and Octavio Nieto-Taladriz	63