## **Table of Contents**

Time Domain Analysis of Propagation Channels in Tunnels  Concepcion Garcia-Pardo, Jose Maria Molina Garci Pardo, Martine Lienard, and Pierre Degauque	1
Time Slot Assignment Algorithms for Reducing Upstream Latency in IEEE 802.16j Networks Shimpei Tanaka, Go Hasegawa, Yoshiaki Taniguchi, and Hirotaka Nakano	6
Space and Time localization in Wireless Sensor Networks  Ustijana Rechkoska Shikoska, Danco Davcev, and Ilinka Ivanoska	12
Nonlinearity Compensation for Super-Positioning Satellite System with Interference Canceller Hiroki Matsuda, Takehiro Ishiguro, Takao Hara, and Minoru Okada	20
Extending the Protocol Interference Model Considering SINR for Wireless Mesh Networks Gyeongyeon Kang, Yoshiaki Taniguchi, Go Hasegawa, and Hirotaka Nakano	26
Impact of Scheduling and Buffer Sizing on TCP Performance over IMT-Advanced  Kunimasa Kakuda and Masato Tsuru	32
Performance Study for End-point Links of Networks  Eleftherios Stergiou, Spyridoula V. Margariti, Gerasimos C. Meletiou, George E. Rizos, and Dimitrios C.  Vasiliadis	38
Bit Error Rate Performance of ESPAR antenna-based Single-RF Diversity for IEEE 802.15.4 Tomoya Kozu, Satoshi Tsukamoto, and Minoru Okada	43
Theoretical Performance of Transform Domain Communication Systems  Guillaume Fumat, Pascal Charge, Ahmed Zoubir, Daniele Fournier-Prunaret, and Irene Mahafeno	48
A Scalable Decentralized MAC Scheduling for Cognitive Wireless Mesh Network  Mehdi Msakni, Luong Dinh Dung, Mohamad Haidar, and Zbigniew Dziong	54
Efficient Distribution of Location Information and Locating Radio Devices for Dynamic Spectrum Allocation Systems  Toan Hoang, Josef Noll, and Torleiv Maseng	61
A Testbed Concept for Cognitive Radio Prototyping  Alexander Viessmann, Christian Kocks, Andrey Skrebtsov, Guido H. Bruck, and Peter Jung	67
ICT-Based Software as a Supervision Tool in Nursing Students' Clinical Training Sari Mettiainen and Anna-Liisa Karjalainen	72

Didactic Embedded Platform and Software Tools for Developing Real Time Operating System  Adam Kaliszan and Mariusz Glabowski	77
Snap or Point and Click? Realizing the Potential of a Teacher Education Self-Study Lorayne Robertson, Dianne Thomson, Lori May, and Jim Greenlaw	83
Multi-Stage Threshold Decoding of High Rate Convolutional Codes for Optical Communications  Muhammad Ahsan Ullah, Ryousuke Omura, Takuma Sato, and Haruo Ogiwara	87
An Invariant based Passive Testing approach for Protocol Data parts  Felipe Lalanne and Stephane Maag	94
A Reconfigurable Prototyping Platform for Modern Communication Systems  Alexander Viessmann, Christian Kocks, Christoph Spiegel, Guido H. Bruck, and Peter Jung	102
Evaluation of Fast Algorithms for Motion Estimation  Ionut Pirnog, Cristian Anghel, Andrei Alexandru Enescu, and Constantin Paleologu	107
Optimum QAM-TCM Schemes Using Left-Circulate Function over GF(2^N)  Calin Vladeanu and Safwan El Assad	112
Generic Security Services API authentication support for the Session Initiation Protocol Lars Strand, Josef Noll, and Wolfgang Leister	117
Technical Criteria for Value-Added Services Creation, Execution and Deployment, on Next Generation Networks Gerardo Rojas Sierra, Felipe Estrada Solano, Julian Andres Caicedo Munoz, and Oscar Mauricio Caicedo Rendon	123
Design of Network Resource Federation towards Future Open Access Networking Michiaki Hayashi, Nobutaka Matsumoto, Kosuke Nishimura, and Hideaki Tanaka	130
Switching Networks with Hysteresis Mechanism  Mariusz Glabowski, Maciej Sobieraj, Maciej Stasiak, and Joanna Weissenberg	135
Performance Study in Multi-rate Switching Networks with Additional Inter-stage Links  Michal Stasiak and Piotr Zwierzykowski	141