Table of Contents

Wireless & Mobile Communications

Cognitive Radio (1)

* Optimum Number of Secondary Users and Optimum Fusion Rule in Cooperative Spectrum Sensing to Maximize Channel Throughput
  Mehran Mashreghi, Bahman Abolhassani

* Performance Analysis of Opportunistic Frequency Diversity Strategy in Cognitive Radio Systems
  Mahsa Ghaznavi, Azizollah Jamshidi

* An Improved Blind Spectrum Sensing Technique for Cognitive Radio Systems
  Navid Tafaghodi Khajavi, Seyed Mohammad-Sajad Sadough

* Power Minimization in Uni-directional Relay Networks with Cognitive Radio Capabilities
  Ardalan Alizadeh, Seyed Mohammad-Sajad Sadough

Cognitive Radio (2)

* SSDF Protection in Cooperative Spectrum Sensing Employing a Computational Trust Evaluation Algorithm
  Mohammad Akbari, Abolfazl Falahati

* An Upper Bound on the Throughput for Myopic Policy in Multi-channel Opportunistic Access
  Saber Salehkaleybar, Seyyed Arash Majd, Mohammad Reza Pakravan

* Joint Transmit Beamforming and Antenna Selection in Cognitive Radio Networks
  Mehdi Ghamari Adian, Hasan Aghaeinia

* Cooperative Beamforming in MIMO-OFDMA Cognitive Radio Systems
  M. Abbasi Jannat-Abad, H. Zamiri-Jafarian

Wireless (1)

* Physically Secure Wireless Transmission Using Deliberate Symbol Convolution
  M. S. Mohammadi, G. R. Mohammadkhani

* Sensitivity analysis of the multiuser offset QAM multicarrier systems to carrier frequency and timing offset
  Hamid Saeedi, Saeed Sadri, Behrouz Farhang-Boroujeny

* DS-CDMA Blind Detection for Frequency-Selective Multipath Channels by Neural Networks
  Majid Shakhsi Dastgahian, Hossein Khoshbin, Saeed Shaerbafl, Alireza Seyedin

* Experimental Investigation of the Performance of Different Modulation Techniques under Controlled FSO Turbulence Channel
  M. Jaz, Z. Ghassemlooy, S. Ansari, O. Adebanjo, H. Le Minh, S. Rajbhandari, A. Gholami

* A New Solution for the Permutation Problem in the Frequency-Domain BSS Using Power-Ratio Correlation
  Masoumeh Hesam, Masoud Geravanchizadeh
Antenna (1)
- Appropriate CCM-based Algorithm for Adaptive Antenna Array Beamforming ........................................... 69
  Hajar Sadeghi, Shahriar Shirvani Moghaddam, Vahid Tabataba Vakili
- MUSIC and MVDR DOA Estimation Algorithms with Higher Resolution and Accuracy ........................................... 76
  Farida Akbari, Shahriar Shirvani Moghaddam, Vahid Tabataba Vakili
- Uneven Dielectric Reflect-Array ........................................................................................................................ 82
  M. Moeini-Fard, M. Khalaj-Amirhosseini

Wireless (2)
- Multiple Query Optimization based on Data Prediction in Wireless Sensor Networks ........................................... 87
  Hanieh Bagheri, Majid NourHosseini
- Geometrically-enhanced group-based mobile queries with uncertainty ................................................................. 95
  Nasser Ghadiri, Ahmad Baraani-Dastjerdi, Nasser Ghasem-Aghaee, Mohammad A. Nematbakhsh

Antenna (2)
- A Compact MIM Zeroth Order Resonator Antenna ................................................................................................. 101
  Seyed Mohammad Saeed Majedi, Amir Reza Attari
- A compact dual-band Triangular slot antenna with three imported slits for WLAN applications .................................. 106
  Mohamad Vatankhah, Mohammadnaghi Azarmanesh, Farzad Yazdani
- A Compact Microstrip Slot Antenna With Novel Eshaped Coupling Aperture ......................................................... 110
  Omid Hoseini Izadi, Mandana Mehrparvar
- Using a Genetic Algorithm to Optimize UWB Microstrip Monopole Antenna with FEM and HFSS ................... 115
  Javad Pourahmadazar, Hamed Shirzad, Changlz Ghobadi, Javad Nourinia

Propagation/UWB systems
- Performance Enhancement of Kurtosis Detector Using Time Reversal Technique .................................. 120
  Ali Mohebbi, Shahriar Shirvani Moghaddam, Darlugh Abbasi-Moghadam, Vahid Tabataba Vakili
- MICS band indoor channel modelling using ray tracing method .......................................................................... 126
  Somayyeh Chamaani, S. Abdullah Mirtaheri, Yuriy I. Nechayev, Peter S. Hall
- A Street canyon approximation model for the 60 GHz propagation channel in an urban environment with rough surfaces ........................................................................................................... 132
  Maryam Eslami Rasekh, Forouhar Farzaneh, Amir Ahmad Shishegar

Access Networks
Optical Networks (1)

- NFS: A New DBA to Alleviate Channel Idle Time in Heterogeneous WDM-EPONs
  Ali Razmkhah, Akbar Ghaftarpour Rahbar

- Effect of a phasor group delay ripple on the performance of phase-modulator based microwave photonic filter
  Arash Mokhtari, Mahmood Akbari

- Mitigating the Impact of Group Velocity Dispersion in a Time-Spreading Optical CDMA System
  Mohammad Reza Salehi, Ebrahim Abiri, Mehran Dezfouli, Keyvan Kazemi

- Least-Congested Distributed Lightpath Allocation
  Saeed Barkabi Zanjani, Akbar Ghaftarpour Rahbar

Optical Networks (2)

- QARWA: A Novel Distributed QoT-Aware RWA to Improve QoS in Transparent Optical Networks
  Amir Kakekhani, Akbar Ghaftarpour Rahbar

- Multi Group Dynamic Bandwidth Allocation Scheme in Long Reach PONs
  Mustafa Vahabzadeh Dolama, Akbar Ghaftarpour Rahbar

Network Theory

Distributed Systems

- Analyzing Program Dynamic Graphs for Software Fault Localization
  Saeed Parsa, Zaynah Mousavian, Mojtahed Vahidi-Asl

- A New Method for Data Redundancy Reduction in RFID Middleware
  Farahnaz Vahdati, Reza Javidan, Ahmad Farrahi

- Location Privacy in Processing Location Dependent Queries in Mobile Database Systems
  Mehrnoosh Tarafdar, Mostafa S. Haghjoo

- A Grid Resource Allocation Method Based on Analytic Hierarchy Process
  Rouhollah Golmohammadi, Hadi Shahriar Shahhoseini

- Improving on HEED protocol of Wireless Sensor Network using Non Probabilistic approach and Fuzzy Logic (HEED-NPF)
  Hoda Taheri, Peyman Neamatollahi, Mahmoud Naghibzadeh, Hossein Yaghmaee

Security (1)

- Adaptive and Quantitative Comparison of J2EE vs. .NET Based on Attack Surface Metric
  Sarvah Nasiri, Reza Azmi, Reza Khalaj
SECURITY ENHANCEMENT FOR TPVD STEGANOGRAPHIC METHOD ................................................................. 206
Nazanin Zaker, Ali Hamzeh

Mojtaba Akbarzadeh, Mohammad Abdollahi Azgomi

Adaptive Random puncturing based Secure block Turbo Coding ................................................................. 216
Mohammad Sadegh Daghighi, Ali Payandeh, Mohammad Reza Aref

Using Identity-Based Secret Public Keys Cryptography for Heuristic Security Analysis in Grid Computing ................................................................. 221
Maysam Hedayati, Seyed Hossein Kamali, Reza Shakerian

Sensor Networks

MCW: A New Weighting Method for Linear Combination of Regressors in WSNs ................................................................. 231
Hadi Shakibian, Nasrollah Moghadam Charkari

Improvements in Support Vector Machine Based Localization in Wireless Sensor Networks ................................................................. 237
Reza Samadian, Majid Noorhosseini

Mohammad Ahmadi Livani, Mahdi Abadi

Traffic Management

Design and Simulation of OSPF Routing Protocol Fuzzy Model By Two Constraint: Bandwidth and Queue Size of Router ................................................................. 249
Hosssein Kari, Hossein Yeghmaee moghadam, Reza Monsefi

An Efficient and Class based Active Queue Management for Next Generation Networks ................................................................. 255
Amir Hossein Mohajerzadeh, Reza Monsefi, Mohammad Hossein Yeghmaee, Nazbanoo Farzaneh

A Fair Active Queue Management Approach Based on Supply and Demand Mode ................................................................. 261
Hamid Saadatfar, Mohammad Hossein Yeghmaee, Habib Rajabi Mashhadi

Congestion Modeling and Synthesis for Multiple Bottlenecked Nodes in Packet-Switched Networks ................................................................. 266
R. Barzamini, M. Shafliee

FADyAD- Fault and congestion Aware Routing Algorithm Based on DyAD Algorithm ................................................................. 274
Amin Mehranazadeh, Ahmad Khademzadeh, Armin Mehran

Cooperative Networks

Performance Study of a New Cooperative Protocol in Rician Fading Channels ................................................................. 280
Sara Efazati, Paeiz Azmi

Beamforming In Multiuser MIMO Downlink Systems: Non-cooperative and cooperative approaches ................................................................. 286
H. Zamiri-Jafarian, S.M.J. Asgari Tabatabae
Throughput Analysis of Multiple-Access-Relay Channel Based on Rateless Coding
Parisa Mansourifard, Masoumeh Nasiri-kenari

Power Allocation for Zero Forcing Scheme in Multi-Antenna Multiple Relays Networks
A. Falahati, Y. Attar Izi

MIMO

Outage Analysis of Equal-Gain Combiner over Shadowed-Rice Fading Channels
Hossein Samimi

Cross Layer Transmit Antenna Selection in MQAM Modulation MIMO Systems
Mohammad Lari, Abbas Mohammadi, Abdolali Abdiipour

Relay Design for SNR Maximization in MIMO Communication Systems
Mohammad Hassan Shariat, Mehrzad Biguesh, Saeed Gazor

Cross Layer Design Based on Adaptive Modulation and Truncated ARQ in MIMO Rician Channels
Mohammad Lari, Abbas Mohammadi, Abdolali Abdiipour

Components and Circuitry

Investigation of Coupling based on Liquid Crystal in two End-Coupled Microstrip Resonators
Mani Yazdanpanahi, Dariush Mirshekar-Syahkal

Wideband Double Layer Substrate Integrated Waveguide Directional Coupler
Zohre Pourgholamhossein, Reza Safian, Hossein Pourghassem

Experimental Investigation of a Dual Band-Reject Filter Using C-Shaped DGS with Improved Q-Factor
Mostafa Attaran Kakhki, Mohammad H. Neshati

An Ultra Low Power Digitally Controlled Oscillator with low jitter and high resolution
Nasser Erfani Majd, Mojtaba Lotfizad, Arash Abadian, Mohammad Bagher Ghaznavi Ghoushchi

Temperature Insensitive Compact Electro-Optic Photonic Crystal Switch
H. Aghababaeian, M. H. V. Samiei

Coding

Iterative Soft Decoding of Reed-Solomon Codes using Information Correction
Farnaz Shayegh, M. Reza Soleymani

Cross-Layer Rateless Coding over Wireless Relay Channel
Mahyar Shirvani Moghaddam, Babak Hossein Khalaj

Modification of Short length LT Block Coding Technique in Erasure Channel
Saeid Mohammad Hosseini, Mohammad Akbari, A. Falahati

Performance Evaluation of Serial Concatenated Convolutional Codes Over Aeronautical Channels
Farhad Mehran
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Allocation</td>
<td></td>
</tr>
<tr>
<td>♦ Distributed Power Allocation based on Coalition and Noncooperative Games for Wireless Networks</td>
<td></td>
</tr>
<tr>
<td>H. Khayatian, R. Saadat, G. Mirjalily</td>
<td>367</td>
</tr>
<tr>
<td>♦ A Novel Practical Utility-Based Algorithm for Adaptive Radio Resource Allocation in OFDMA Wireless Networks</td>
<td></td>
</tr>
<tr>
<td>Hamzeh Shamsi Koushki, Keivan Navaie</td>
<td>373</td>
</tr>
<tr>
<td>♦ Slot Allocation Algorithm in Combined Distributed and Centralized Scheduling Scheme for IEEE 802.16 Based Wireless Mesh Networks</td>
<td></td>
</tr>
<tr>
<td>Ali Behfarnia, Vahid Tabataba Vakili</td>
<td>379</td>
</tr>
<tr>
<td>♦ Intelligent Cross-Layer Adaptation Scheme for Wireless Links with QoS-Guaranteed Traffic</td>
<td></td>
</tr>
<tr>
<td>Younes Abdi, Paeiz Azmi</td>
<td>385</td>
</tr>
<tr>
<td>Sensor/WMC</td>
<td></td>
</tr>
<tr>
<td>♦ Dynamic Balanced Spanning Tree (DBST) for Data Aggregation in Wireless Sensor Networks</td>
<td></td>
</tr>
<tr>
<td>Avid Avokh, Ghasem Mirjalily</td>
<td>391</td>
</tr>
<tr>
<td>♦ An Energy Efficient Algorithm for Cluster-Head Selection in WSNs</td>
<td></td>
</tr>
<tr>
<td>Mohammad Javad Hajikhani, Bahman Abolhassani</td>
<td>397</td>
</tr>
<tr>
<td>♦ A Distributed Data-centric Storage Method for Hot Spot Mitigation In Wireless Sensor Networks</td>
<td></td>
</tr>
<tr>
<td>Maryam Tahani, Masoud Sabaei</td>
<td>401</td>
</tr>
<tr>
<td>♦ Improving threshold assignment for cluster head selection in hierarchical wireless sensor networks</td>
<td></td>
</tr>
<tr>
<td>M. Saadat, R. Saadat, G.Mirjalily</td>
<td>409</td>
</tr>
<tr>
<td>♦ A Novel Intelligent Energy-Efficient Delay-Aware Routing in WSN, based on Compressive Sensing</td>
<td></td>
</tr>
<tr>
<td>Saeed Mehrjoo, Jamshld Shanbehzadeh, Mir Mohsen Pediram</td>
<td>415</td>
</tr>
<tr>
<td>OFDM</td>
<td></td>
</tr>
<tr>
<td>♦ An Improved Blind Channel Estimation Algorithm for OFDM Systems</td>
<td></td>
</tr>
<tr>
<td>S. Ghadrudan, M. Ahmadianan, S. Salari, M. Heydarzadeh</td>
<td>421</td>
</tr>
<tr>
<td>♦ Reduction in Peak to Average Power Ratio of OFDM Signals Using a New Continuous Linear Companding Transform</td>
<td></td>
</tr>
<tr>
<td>Vahid Tabataba Vakili, Adel Zahedi</td>
<td>426</td>
</tr>
<tr>
<td>♦ Frequency-Domain Equalization for MIMO-OFDM over Doubly Selective Channels</td>
<td></td>
</tr>
<tr>
<td>Mojtaba Beheshti, Mohammad Javad Omidl, Ali Mohammad Doost-Hoseini</td>
<td>431</td>
</tr>
<tr>
<td>♦ A New Fast Algorithm for Carrier Frequency Offset Estimation in SISO-OFDM Systems</td>
<td></td>
</tr>
<tr>
<td>Saeid Balanesrin Kordan, Vahid Tabataba Vakili, Bahman Abolhassani</td>
<td>437</td>
</tr>
<tr>
<td>Networks Requirements</td>
<td></td>
</tr>
<tr>
<td>♦ Ruby: Application-Specific Networks-on-Chips Design Procedure based on Bandwidth Requirement and Fault-Tolerance</td>
<td></td>
</tr>
<tr>
<td>Atena Roshan Feikr, Ahmad Khademzadeh, Vahhab Samadi Bokharaei, Majid Janidarmian</td>
<td>443</td>
</tr>
</tbody>
</table>
Optimal Power Allocation to Improve the Performance of Narrowband Cooperative Networks
Banafsheh Lashkari, Mehrzad Biguesh, Shapour Golbahar Haghighi

Reliability analysis of the auto-tracked FSO communication links
F. D. Kashani, M. Reza Hedayati Rad, MA. Reza Hedayati Rad, M. Reza Mahzoun

5Gb/s phase tracking clock recovery with New Line Coding in 0.35 u CMOS Process
Edris Azadi, Habib Ghasemizadeh, Abdollah Khoei, Khayrollah Hadidi

WNA: Wireless Network Analyzer for High Throughput Wireless LANs
Seyyed Ali Reza Hoseini, Mahdi Jelodari Mamaghani, Behnam Khodabandeloo, Seyyed Mahan Molkara, Nasser Yazdani

Ad Hoc/Sensor Networks

Improved Rate Controlled Reliable Transport Protocol (IRCRT) for wireless sensor networks
Fahimeh Akbari, Mohammad Hossien Yaghmaee

Quorum-Based Pure Directional Neighbor Discovery in Self-Organized Ad Hoc Networks
Sina Khatibi, Mehdi Dehghan, Mohammad Ali Poormina

Improving Security between Nodes in Wireless Ad-Hoc Networks
H. Hallani, A. Hellany

Analyzing Delay Limits of High-Speed Wireless Ad hoc Networks Based on IEEE 802.11n
Peyman Teymoori, Nasser Yazdani, Ali Reza Hoseini, Mohammad Reza Effatparvar

Reliable Disjoint Path Set Selection in Mobile Ad-hoc Networks Using Noisy Hopfield Neural Network
Ehsan Hemmati, Mansour Sheikhan