

# **2012 21st Annual Wireless and Optical Communications Conference**

**(WOCC 2012)**

**Kaohsiung, Taiwan  
19-21 April 2012**



**IEEE Catalog Number: CFP12WOC-PRT  
ISBN: 978-1-4673-0940-0**

## Table of Content

[Home](#)

1	<a href="#">Slotted Aloha for Cognitive Radio Users and its Tagged User Analysis</a>	P.1
2	<a href="#">Performance Analysis of Cooperative Diversity with Multiple Incremental Relays and Selection Combining over Rayleigh Fading Channels</a>	P.6
3	<a href="#">Regenerative Wavelength Conversion based on Semiconductor Devices</a>	P.11
4	<a href="#">Recent Advancements in Fiber Optic Transmission</a>	P.14
5	<a href="#">Dispersion monitoring in high-speed optical communication systems</a>	P.16
6	<a href="#">Wavelength-Reused ONUs for Next-Generation Optical WDM/OFDMA-PON</a>	P.20
7	<a href="#">Advances in Access Networks – from Long-reach (LR) to Short-reach (SR), and from TDM/WDM to OFDM</a>	P.22
8	<a href="#">An Innovative Scheme for the UNI interworking of ASON and GMPLS</a>	P.25
9	<a href="#">AC-Power-Signal-Biased LED Modulation Method for Ubiquitous Visible Light Communication</a>	P.27
10	<a href="#">Interactive Human Action Search Using Body Language</a>	P.30
11	<a href="#">Queueing behavior of Hybrid ARQ wireless system with finite buffer capacity</a>	P.32
12	<a href="#">Throughput Stability and Energy Consumption of IEEE 802.15.4 Beacon Enabled Mode</a>	P.37
13	<a href="#">Employing Four-Band OFDM Signals for 40-Gb/s PON with 128 ONUs in Single-Wavelength in 10-GHz Bandwidth</a>	P.43
14	<a href="#">Companding Transform for PAPR Reduction in Coherent Optical OFDM System</a>	P.46
15	<a href="#">Energy Efficient Passive Optical Networks with Low Power VCSELs</a>	P.48
16	<a href="#">Enhanced IPv6 Ping and TraceRoute</a>	P.51
17	<a href="#">Recent progress of high-speed burst-mode transceiver technologies for TDM-PON systems</a>	P.59
18	<a href="#">Feasibility of Optical Technologies for Packet Switching Networks</a>	P.63
19	<a href="#">Experimental Evaluation of Energy Savings of Virtual Machines in the Implementation of Cloud Computing</a>	P.65
20	<a href="#">Scheduling Memory Access on a Distributed Cloud Storage Network</a>	P.71
21	<a href="#">Cross-layer design for mobile multimedia</a>	P.77
22	<a href="#">Outage Performance of RFID Systems with Multiple Reader Antennas over Correlated Forward and Backscatter Fading Channels</a>	P.81
23	<a href="#">Power Aware Seamless Emergency Communication for Heterogeneous Wireless Networks</a>	P.83
24	<a href="#">Self-Optimization of Resource Allocation in Cooperative Relay Networks</a>	P.89
25	<a href="#">Energy Comparison of Balanced and Progressive Sensor Networks</a>	P.93
26	<a href="#">Energy Efficient Clustering Protocol for Early Warning System for Miner's Safety in Coal Mines</a>	P.99

27	<a href="#"><u>Design and Analysis of Low-Complexity Blind Beam Steering Scheme for Receive Beamform</u></a>	P.105
28	<a href="#"><u>The Novel Delay-Constraint Topology Control Algorithm in WSNs</u></a>	P.111
29	<a href="#"><u>FPGA Implementation of Alamouti MIMO Log-Likelihood Ratio Selection for Receiver-Antenna Selection Combining</u></a>	P.116
30	<a href="#"><u>Participatory Sensing Platform to Revive Communication Network in Post-Disaster Scenario</u></a>	P.118
31	<a href="#"><u>DVM based Scalable and Adaptive Multipath Routing in MANET For Emergency Rescue Application</u></a>	P.123
32	<a href="#"><u>Waveguide Crossings by Use of Mutlimode Tapered Structures</u></a>	P.130
33	<a href="#"><u>A Novel Coupler with High Mode Conversion Efficiency for SMF and SOI Single-Mode Waveguide Coupling Interface</u></a>	P.132
34	<a href="#"><u>Coherently Injection-Locked Weak-Resonant-Cavity Laser Diode for Optical 16-QAM-OFDM Transmission at 4 Gb/s</u></a>	P.138
35	<a href="#"><u>Novel OPSK Modulation Technique for DWDM Free Space Optical Communication System</u></a>	P.140
36	<a href="#"><u>Mach-Zehnder Fiber Interferometers Based on Liquid-filled Photonic Crystal Fibers</u></a>	P.146
37	<a href="#"><u>Hybrid OFDM-Based Multi-Band Wireless and Baseband Downstream Signals in Fiber Access Network</u></a>	P.149
38	<a href="#"><u>Adaptive Power Adjustment of Upstream Traffic for Energy-Saving PON Access</u></a>	P.152
39	<a href="#"><u>On Designing Blu-ray Pickup Head System with Liquid Crystal Lens</u></a>	P.155
40	<a href="#"><u>Optimal Dispersion Compensation and Polarization-Mode Dispersion Compensation in All-Optical 40 Gbps-per-Channel-Based WDM Wavelength-Routed Optical Fiber Networks</u></a>	P.158
41	<a href="#"><u>An Efficient Algorithm for Designing Multi-hop Wireless Connections for Wireless-Optical Broadband Access Network</u></a>	P.163
42	<a href="#"><u>AER: Adaptive Energy Efficient Routing Protocol for Network of Flying Robots Monitoring over Disaster Hit Area</u></a>	P.166
43	<a href="#"><u>Wireless Network Visualization in 3D Virtual Environment Framework</u></a>	P.170
44	<a href="#"><u>Time Division Duplex for Preventing Reflection Interference in Visible Light Communication</u></a>	P.175
45	<a href="#"><u>Concentration Effect of Dispersed-Graphene Based Saturable Absorber on Stabilizing and Shortening Mode-Locked Pulse</u></a>	P.178
46	<a href="#"><u>Simulation of laser phenomenon of cholesteric liquid crystal using auxillary differential equation finite-difference time-domain method</u></a>	P.180
47	<a href="#"><u>Electrical and Optical Switchings of the Direcitons of Cholesteric Liquid Crystals Gratings</u></a>	P.183
48	<a href="#"><u>Collision Aware Topology Control Algorithm in Wireless Multihop Networks</u></a>	P.186
49	<a href="#"><u>Analysis of Narrow Gap Induced additional Micro-ring Loss</u></a>	P.191
50	<a href="#"><u>Ultra compact Silicon Microring Filter</u></a>	P.193
51	<a href="#"><u>Photonic Ultra-Wide-Band Doublet Pulse using Tapered-Directional Coupler integrated Electroabsorption Modulator</u></a>	P.196
52	<a href="#"><u>A New Scheme of Low-Cost TO-Based Butterfly-Type Laser Module Packaging</u></a>	P.198
53	<a href="#"><u>Sum Frequency Generation of Tunable CW Fiber Lasers</u></a>	P.201

54	<a href="#">Mid-Infrared Generation by Difference Frequency Generation of CW Fiber Laser</a>	P.203
55	<a href="#">A Circular Ring Laser Diode with Tow Y-Junction Couplers</a>	P.206

