Robert Borkowski - DTU Orbit (15/11/2019)

Robert Borkowski

Person

Research outputs:

Combined Optical and Electrical Spectrum Shaping for High-Baud-Rate Nyquist-WDM Transceivers
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Performance emulation and parameter estimation for nonlinear fibre-optic links
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Clustering algorithms for Stokes space modulation format recognition
Boada, R., Borkowski, R. & Tafur Monroy, I., 2015, In : Optics Express. 23, 12, p. 15521-15531
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Cognitive Optical Network Testbed: EU Project CHRON
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Focusing over Optical Fiber Using Time Reversal
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Single-step emulation of nonlinear fiber-optic link with gaussian mixture model
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Advanced Modulation Formats in Cognitive Optical Networks: EU project CHRON Demonstration
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Anatomy of a digital coherent receiver.
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Applications of expectation maximization algorithm for coherent optical communication
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review
DSP-Based Focusing over Optical Fiber Using Time Reversal
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Enabling Technologies for Cognitive Optical Networks

Experimental Demonstration of a Cognitive Optical Network for Reduction of Restoration Time
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Experimental demonstration of the maximum likelihood-based chromatic dispersion estimator for coherent receivers
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Experimental evaluation of prefiltering for 56 Gbaud DP-QPSK signal transmission in 75 GHz WDM grid
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Joint Iterative Carrier Synchronization and Signal Detection Employing Expectation Maximization
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Robust Cognitive-GN BER Estimator for Dynamic WDM Networks
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Turbo Equalization for Digital Coherent Receivers
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Turbo Equalization Techniques Toward Robust PDM 16-QAM Optical Fiber Transmission
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review
25 Gbit/s QPSK Hybrid Fiber-Wireless Transmission in the W-Band (75–110 GHz) With Remote Antenna Unit for In-Building Wireless Networks
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Cognition-Enabling Techniques in Heterogeneous and Flexgrid Optical Communication Networks
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Experimental demonstration of a cognitive quality of transmission estimator for optical communication systems
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Experimental Demonstration of a Cognitive Quality of Transmission Estimator for Optical Communication Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Experimental Demonstration of Mixed Formats and Bit Rates Signal Allocation for Spectrum-flexible Optical Networking
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Experimental Study on OSNR Requirements for Spectrum-Flexible Optical Networks
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Impact of Gain Saturation on the Parametric Amplification of 16-QAM Signals
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Nonlinear impairment compensation using expectation maximization for dispersion managed and unmanaged PDM 16-QAM transmission
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Nonlinear Impairment Compensation Using Expectation Maximization for PDM 16-QAM Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Performance Evaluation of a SOA-based Rack-To-Rack Switch for Optical Interconnects Exploiting NRZ-DPSK
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

100 Gbit/s hybrid optical fiber-wireless link in the W-band (75-110 GHz)
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Cognitive Heterogeneous Reconfigurable Optical Networks (CHRON): Enabling Technologies and Techniques
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Experimental Adaptive Digital Performance Monitoring for Optical DP-QPSK Coherent Receiver
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Experimental Demonstration of a Bandwidth Scalable LAN Emulation over EPON Employing OFDMA
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Experimental demonstration of adaptive digital monitoring and compensation of chromatic dispersion for coherent DP-QPSK receiver
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Experimental demonstration of an improved EPON architecture using OFDMA for bandwidth scalable LAN emulation
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Radio over fiber link with adaptive order n-QAM optical phase modulated OFDM and digital coherent detection
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Reconfigurable Digital Coherent Receiver for Hybrid Optical Fiber/Wireless Metro-Access Networks
Research output: Contribution to conference › Poster – Annual report year: 2011 › Research › peer-review

Reconfigurable Digital Coherent Receiver for Metro-Access Networks Supporting Mixed Modulation Formats and Bit-rates
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Projects:
Cognitive Optical Performance Monitoring
Borkowski, R., Tafur Monroy, I., Zibar, D., Oxenløwe, L. K., Schaeffer, C. G. & Rosenkranz, W.
Technical University of Denmark
01/04/2011 → 18/06/2014
Project: PhD

CHRON: Cognitive Heterogeneous Reconfigurable Optical Network
Attalah, N., Borkowski, R., Tafur Monroy, I. & Caballero Jambrina, A.
Forsk. EU - Rammeprogram
01/07/2010 → 30/07/2013
Project: Research