

Inhaltsverzeichnis

1	Modulation und Kodierung in optischen Kernnetzen	11
	A. Leven, Bell Labs, Alcatel Lucent Stuttgart	
2	Cost Savings and Robustness Improvements in IP-over-DWDM Core Networks by Employment of CD-ROADMs and Advanced Multilayer Survivability Schemes	14
	A. Autenrieth, M. Neugirg, ADVA AG Optical Networking; M. Gunkel, Deutsche Telekom Technik GmbH	
3	Real-time Nyquist Pulse Transmission	21
	D. Hillerkuss, R. Schmogrow, C. Koos, W. Freude, J. Leuthold, KIT; B. Nebendahl, T. Dippon, Agilent Technologies	
4	Soft-Decision Turbo Decoding for Coherent Transmission with Phase Slips	29
	A. Bisplinghoff, S. Langenbach, B. Schmauss, Uni Erlangen-Nürnberg, Cisco Optical GmbH	
5	Analytical and numerical studies of quantization effects in coherent optical OFDM transmission with 100 Gbit/s and beyond	34
	M. Bernhard, D. Rörich, T. Handte, J. Speidel, Uni Stuttgart	
6	Is PS-QPSK really an alternative to PDMQPSK?	41
	J. K. Fischer, M. Nölle, L. Molle, C. Schmidt-Langhorst, C. Schubert, Fraunhofer Institut für Nachrichtentechnik, Heinrich-Hertz-Institut Berlin	
7	Analytische Bestimmung der Varianz der durch 16 QAM-Kanäle induzierten XPM-Phasenfehlers	47
	D. I. Kroushkov, M. Jazayerifar, A. Juarez, S. Warm, K. Petermann, TU Berlin	
8	Investigation of near optimum iterative equalizers and decoders for optical coherent Gbit/s transmission	50
	K. Oestreich, J. Speidel, Universität, Stuttgart	
9	On the system level benefit of optimized four-dimensional optical modulation formats	57
	H. Grießer, M. Eiselt, K. Grobe, J.-P. Elbers, ADVA AG Optical Networking	
10	WDM-PON für Zugangsnetze der nächsten Generation	61
	S. Pachnicke, M. Eiselt, H. Grießer, K. Grobe, J.-P. Elbers, ADVA AG	
11	Maintenance and Deployment of Fibre Infrastructure in the Access Domain for FTTH Networks	67
	A. Ehrhardt, F. Escher, H. M. Foisel, C. Gerlach, B. Nagel, L. Schürer, A. Templin, Deutsche Telekom Technik GmbH	
12	Optical FMCW Radar for Monitoring of Passive Optical Networks	71
	S. Gäde, R. Herschel, M. Jastram, C. G. Schäffer, Helmut-Schmidt-Universität Hamburg	
13	Analysis and Modeling of Phase Noise for Verification and Optimization of Soft-Decision FEC	76
	D. Pflueger, F. N. Hauske, Y. Zhao, J. Qi, C. Xie, G. Bauch, Huawei Techn., UniBW München	

14	Quantifizierung und Reduktion von OSNR-Einbußen durch Kanalübersprechen in hochbitratigen Mehrkernfasersystemen	82
	M. Westhäuser, S. Akhtari, M. Finkenbusch, P. M. Krummrich, TU Dortmund, Lehrstuhl für Hochfrequenztechnik	
15	Compensation of Linear and Nonlinear Signal Distortion by Optimized Digital Backward Propagation	90
	C.-Y. Lin, R. Asif, M. Holtmannspötter, B. Schmauss, Uni Erlangen-Nürnberg, Erlangen Graduate School in Adv. Opt. Techn.	
16	Non intrusive In-Service PMD Messungen an modulierten Signalen mittels kohärenter Detektion	96
	V. Lecoche, F. Sauron, A. Champavère, F. Heismann, P. Winterling, JDSU Deutschland	
17	Modified DFT Filter Bank with One-tap per Subchannel Equalizer for Frequency Domain Chromatic Dispersion Compensation	103
	I. Slim, L. G. Baltar, A. Mezghani, J. A. Nossek, TU München; F. N. Hauske, Huawei Technologies	
18	Quality metrics for advanced modulation formats in optical communications: OSNR, Q-factor, EVM, and BER	107
	R. Schmogrow, D. Hillerkuss, C. Koos, W. Freude, J. Leuthold, KIT; B. Nebendahl, Agilent Technologies	
19	Limits of Ethernet based X2 connections for LTE Advanced base stations	112
	P. Farkas, M. Schlosser, Fraunhofer Heinrich-Hertz-Institut, Berlin	
20	Analysis of Ultra-High Bitrate Wireless Links as a Bridge for Optical Networks	116
	T. Schneider, A. Wiatrek, S. Preußler, R.-P. Braun, M. Grigat, FH Leipzig, Deutsche Telekom Innov. Lab.	
21	Phase Modulated Optical Links for Efficient Realization of Complex Millimeter Wave Communication Systems	120
	R. Herschel, C. G. Schäffer, B. Müller, Helmut-Schmidt-Universität Hamburg	
22	Network Element Characteristics for Traffic Load Adaptive Network Operation	124
	C. Lange, H. Lehmann, Deutsche Telekom Innovation Laboratories; R. Schlenk, Alcatel-Lucent	
23	Combined OLT Form-Factor and Power-Consumption Analysis for WDM-based Next-Generation PON	132
	R. Huelsermann, D. Breuer, Deutsche Telekom Innovation Laboratories; K. Grobe, J.-P. Elbers, ADVA AG Optical Networking	
24	Vergleich von Kosten und Energieverbrauch für adaptive und klassische Netze	137
	A. Klekamp, U. Gebhard, Bell Labs, Alcatel-Lucent	
25	Spectral Network Efficiency Evaluation of Optical Networks with Software Defined Optics and Flexible WDM Grid Variants	143
	A. Autenrieth, J.-P. Elbers, Michael Eiselt, Helmut Grießer, Klaus Grobe, ADVA AG	
26	Entwicklungskonzepte der DWDM Transportnetze bei der Einführung der kohärenten Wellenlängenübermittlung	149
	R. Hartung, H. Stahl, Ericsson Deutschland GmbH	

27	Optical Internetworking Forum (OIF) Worldwide Interoperability Tests and Demonstrations 2012	157
	C. Gerlach, L. Schürer, S. Pizzaja, H.-M. Foisel, Deutsche Telekom Technik GmbH	

Posterbeiträge

P1	Hybrid Integrated Polymer – Indium Phosphide Dual-Polarization Receiver for QPSK and QAM Modulation Formats	163
	M. Kroh, A. Theurer, A. Matiss, A. G. Steffan, u2t Photonics AG; J. Wang, C. Zawadzki, Z. Zhang, N. Keil, N. Grote, T. Richter, C. Schubert, Fraunhofer Institut für Nachrichtentechnik, Heinrich-Hertz-Institut Berlin	
P2	Polymer Based Coherent Receiver for Next Generation Optical Access Networks	167
	R. Seidel, A. Theurer, C. Zawadzki, Z. Zhang, N. Keil, A. Matiss, A. G. Steffan, Fraunhofer Institute for Telecommunications, Heinrich Hertz Institute	
P3	Mitigation of Fiber Nonlinearities in CO-OFDM Systems	170
	O. Jan, M. El-Darawy, A. Al-Bermani, K. Puntsri, R. Noé, Universität Paderborn	
P4	Central Monitoring of Passive Optical Networks using Optical Code Division Multiplexing	173
	M. Förster, Deutsche Telekom Technik GmbH; K. Jamshidi, C.-A. Bunge, FH Leipzig	
P5	Cost Effective Scalable Optical Networks - Transparent Optically Routed Network (TOR-NET)	177
	R.-P. Braun, Deutsche Telekom AG Laboratories; D. Fritzsche, EICT GmbH	
P6	Rapid Development of Software Components for the Secure Communication of Highly Reliable Optical Cross-Connect Systems	180
	P. Giouroukos, S. Hofmann, T. Tretter, Alcatel-Lucent	
P7	A second order cone model for robust network design in telecommunication	188
	C. Helmberg, P. Hoffmann, TU Chemnitz	
P8	Zuverlässigkeitsuntersuchung zur PON-Überwachungsmethode Kombinatorik kaskadierter Spiegel (Kaskatorik) bei vielen Teilnehmern und geringer Ortsauflösung der Messeinrichtung	194
	C. M. Bentz, P. M. Krummrich, TU Dortmund	
P9	An Optimization-Heuristic Approach to Dynamic Optical Bypassing	200
	F. Feller, Universität Stuttgart	
P10	PON für Heimnetzwerke (HomePON)	208
	A. Bluschke, M. Matthews, P. Rietzsch, Teleconnect GmbH	
P11	Technology Ecosystem Evolution for Packet Optical Transport 2.0	212
	B. Giguere, EXFO Inc.	
P12	Real-time Synchronous 16-QAM Optical Transmission System Using Blind Phase Search and QPSK Partitioning Carrier Recovery Techniques	213
	A. Al-Bermani, C. Wördehoff, K. Puntsri, O. Jan, U. Rückert, R. Noé, University Paderborn, Bielefeld University	

P13 Managing Packet optical Integration	216
G. Grammel, O. Jahreis, Juniper Networks	
P14 LED als Photodetektor in POF-basierten Kommunikationssystemen	219
V. Lange, S. Storm, R. Hönl, D. Kühlke, Hochschule Furtwangen	
P15 Wideband electrically tunable dispersion compensator/producer	225
K. Jamshidi, S. Preußler, A. Wiatrek, T. Schneider, FH Leipzig	
P16 Tunable Delay Line Based on Fourier-transformation and Linear Phase Modulation with High Time-Bandwidth Product	229
A. Mokhtari, S. Preußler, K. Jamshidi, M. Akbari, T. Schneider, FH Leipzig, Sharif University of Technology	