

- Zubia, J.**, G. Durana, G. Aldabaldetrek, J. Arrue, M.A. Losada, and M. Lopez-Higuera. New method to calculate mode conversion coefficients in SI multimode optical fibers; *J-LT Mar 03* 776-781
- Zubin Wang**, see Min Yong Jeon, *J-LT Nov 03* 2723-2733
- Zweck, J.**, see Sinkin, O.V., *J-LT Jan 03* 61-68

SUBJECT INDEX

A

Access protocols

- Genetic algm.-based methodology for optimizing multiservice convergence in metro WDM network. *Hyo-Sik Yang*, +, *J-LT May 2003* 1114-1133
- HORNET archit., demons. and syst. anal. *White, I.M.*, +, *J-LT Nov 03* 2489-2498
- multimedia streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03* 2123-2144
- opt. nets., differentiated reliab. *Tacca, M.*, +, *J-LT Nov 03* 2576-2586
- survivable opt. mesh nets., control and mgt. protocols. *Assi, C.*, +, *J-LT Nov 03* 2638-2651

Access protocols; cf. Code division multiple access**Acoustooptic effects**

- birefr. two-mode opt. fibers, acoustooptic interact., acoustic birefr. effect. *Langli, B.*, +, *J-LT Feb 03* 528-535

Acoustooptic filters

- birefr. two-mode opt. fibers, acoustooptic interact., acoustic birefr. effect. *Langli, B.*, +, *J-LT Feb 03* 528-535

Adaptive equalizers

- min. MSE controlled PLC opt. equalizer for chromatic dispers. compensation. *Secondini, M.*, +, *J-LT Oct 03* 2322-2331

Aerosols

- nanosatellite cluster-detector array receiver laser commun. *Bushuev, D.*, +, *J-LT Feb 03* 447-455

Alkali metal compounds; cf. Lithium compounds**All pass circuits**

- logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583

Aluminum compounds

- Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031
- GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
- GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S.*, +, *J-LT Jan 03* 170-175
- Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *JLT May 2003* 1339-1349

Amplifiers; cf. Distributed amplifiers; Optical fiber amplifiers; Semiconductor optical amplifiers**Amplitude modulation**

- multisectional modeling of high-speed EO modulators integrated in microwave cct. CAD environment. *Pirola, M.*, +, *J-LT Dec 03* 2989-2996
- opt. carrier supply module, flattened opt. multicarrier gener., sinusoidal amplit. and phase hybrid modulation. *Fujiwara, M.*, +, *JLT Nov 03* 2705-2714

Amplitude modulation; cf. Amplitude shift keying; Quadrature amplitude modulation**Amplitude shift keying**

- digital-microwave link, opt. generated elec.-modulation formats. *Candelas, P.*, +, *J-LT Feb 03* 496-499
- DPSK and OOK WDM transm., transoceanic dists. and their perform. degradations, nonlin. phase noise, comparative study. *Mizuochi, T.*, +, *J-LT Sep 03* 1933-1943
- mm-wave data-modulated opt. sig. generation using opt. injection PLL. *Johansson, L.A.*, +, *J-LT Feb 03* 511-520

Analog circuits

- cct. model for multiple transverse mode vertical-cavity surface emitting lasers. *Marozsak, T.*, *J-LT Dec 03* 2977-2982

Analog-digital conversion

- crit. slowing down, bistable S-SEED. *Clare, B.A.*, +, *J-LT Nov 03* 2883-2890
- fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. *Jecheon Han*, +, *JLT Jun 03* 1504-1509
- optical down-sampling of wide-band microwave signals. *Juodawlkis, P.W.*, +, *J-LT Dec 03* 3116-3124
- photonic A/D conversion using low-temperature-grown GaAs MSM switches integrated with Si-CMOS. *Urata, R.*, +, *J-LT Dec 03* 3104-3115
- photonic time-stretched ADC: fundamental concepts and practical considerations. *Han, Y.*, +, *J-LT Dec 03* 3085-3103

Angle modulation; cf. Frequency modulation; Phase modulation**Annealing**

- Brillouin shift, dispers.-shifted fiber and annealing effect, wide-range temp. depend. *Yongqian Li*, +, *J-LT Jul 03* 1663-1667
- Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

Antenna arrays; cf. Antenna phased arrays**Antenna phased arrays**

- single-chip integrated EO polymer photonic RF phase shifter array. *Han, J.*, +, *J-LT Dec 03* 3257-3261

Antennas; cf. Leaky wave antennas**Application specific integrated circuits**

- design of large receiver and transmitter arrays for OE-VLSI applications. *Venditti, M.B.*, +, *J-LT Dec 03* 3406-3416

Application specific integrated circuits; cf. Mixed analog-digital integrated circuits**Approximation methods**

- blocking perform. anal. of WDM all-opt. nets., effective method. *Jintao Xiong*, +, *J-LT Jun 03* 1421-1434
- FDTD BPM for TE- and TM-wave anal. *Shibayama, J.*, +, *J-LT Jul 03* 1709-1715
- opt. planar waveguides, birefr. control. *Xiuli Zhao*, +, *J-LT Oct 03* 2352-2357
- weakly guiding opt. fibers, closed WKB formulas. *Paiano, G.*, +, *J-LT Jan 03* 286-292

Arrays

- design of large receiver and transmitter arrays for OE-VLSI applications. *Venditti, M.B.*, +, *J-LT Dec 03* 3406-3416

Array signal processing

- multiple beam fiber-optic beamformer with binary array of delay lines. *Granieri, S.*, +, *J-LT Dec 03* (110) Dec 03 3262-3272

Asynchronous transfer mode

- all-opt. switch fabrics, generalized multiprotocol label switching. *Papadimitriou, G.I.*, +, *J-LT Feb 03* 384-405
- automatically switched opt. nets., PNNI-based control plane. *Sanchez-Lopez, S.*, +, *J-LT Nov 03* 2673-2682
- FLBM-based all-opt. packet switch, exact/approx. anal. modeling. *Singh, Y.N.*, +, *J-LT Mar 03* 719-726
- GMPLS nets., routing and protection. *Elwalid, A.*, +, *J-LT Nov 03* 2828-2838
- joint multilayer protection, packet-over-opt. nets., cost effectiveness. *Chunxiao Chigan*, +, *J-LT Nov 03* 2694-2704

Atomic clocks

- stabilizing optoelectronic microwave oscillator with photonic filters. *Strekalov, D.*, +, *J-LT Dec 03* 3052-3061

Atomic force microscopy

- germano-silica planar waveguides, 157-nm F₂ laser radiation photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148
- VUV laser-induced refr.-index change and birefr., std. opt. fibers. *Chen, K.P.*, +, *J-LT Sep 03* 1969-1977

Attenuation measurement

- near-field and far-field attenuation models for free-space variable optical attenuators. *Zhang, X.M.*, +, *J-LT Dec 03* 3417-3426

Avalanche diodes; cf. Avalanche photodiodes**Avalanche photodiodes**

- burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575
- free space opt. PPM CDMA systs. *Ohtsuki, T.*, *J-LT Feb 03* 406-411
- impulse response, ionization PDF. *Tan, C.H.*, +, *J-LT Jan 03* 155-159

B

Backward wave oscillators

BW cancellation in distributed traveling-wave photodetectors. *Murthy, S.*, +, *J-LT Dec 03* 3071-3077

Backward wave tubes; cf. Backward wave oscillators**Bandpass filters**

birefr. two-mode opt. fibers, acoustooptic interact., acoustic birefr. effect. *Langli, B.*, +, *J-LT Feb 03* 528-535
electrooptical long-period gratings, reconfigurable p-shifted/Mach-Zehnder bandpass filters. *Kulishov, M.*, +, *J-LT Mar 03* 854-861
subband all-pass filter archits., appls., dispers. and dispers.-slope compensation and continuously variable delay lines. *Madsen, C.K.*, *J-LT Oct 03* 2412-2420

Band-stop filters; cf. Notch filters**Band structure**

simultaneous 3-band modulation and FO transmission of 2.5-Gb/s baseband, microwave-, and 60-GHz-band signals on single wavelength. *Ikedu, K.*, +, *J-LT Dec 03* 3194-3202

Bandwidth allocation

optical down-sampling of wide-band microwave signals. *Juodawlkis, P.W.*, +, *J-LT Dec 03* 3116-3124

Behavioral sciences

sys.-level modeling and simulation of 10G optoelectronic interconnect. *Kahrs, M.*, +, *J-LT Dec 03* 3244-3256

Bessel functions

matched-clad opt. fibers, variational anal. *Chiadini, F.*, +, *J-LT Jan 03* 96-105

Bessel series/transforms

evaluating joint second-order PMD stats., fast and accurate method. *Forestieri, E.*, *J-LT Nov 03* 2942-2952

Bibliographies

opt. regeneration, 40 Gb/s and beyond. *Leclerc, O.*, +, *J-LT Nov 03* 2779-2790

Biomedical measurement; cf. Blood flow measurement**Bipolar integrated circuits**

Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235

Bipolar transistors; cf. Heterojunction bipolar transistors**Birefringence**

Characterization of stress-applied polariz.-maintaining (PM) fiber through photoelastic tomography. *Yongwoo Park*, +, *J-LT Apr 03* 997-1004
E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304
freq. depend. of DGD, concatenated single-mode fiber systs., anal. form. *Yoshida-Dierolf, M.*, +, *J-LT Oct 03* 2217-2223
germano-silica planar waveguides, 157-nm F₂ laser radiation photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148
LiNbO₃ tunable spectral slicing waveguide filter design, DWDM appls. *Taylor, H.F.*, *J-LT Mar 03* 837-847
mean differential group delay of randomly birefr. spun fibers, anal. formula. *Galtarossa, A.*, +, *J-LT Jul 03* 1635-1643
opt. planar waveguides, birefr. control. *Xiuli Zhao*, +, *J-LT Oct 03* 2352-2357
photonic cryst. fiber, birefr., magneto-opt. method/FEA. *Peyrilloux, A.*, +, *J-LT Feb 03* 536-539
ratio between phase and group birefringence in optical single-mode fibers. *Legre, M.*, +, *J-LT Dec 03* 3374-3378
sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060
Theoretical anal. of reflectometric meas. in opt. fiber links affected by polariz.-depend. loss. *Galtarossa, A.*, +, *J-LT May 2003* 1233-1241
two-mode opt. fibers, acoustooptic interact., acoustic birefr. effect. *Langli, B.*, +, *J-LT Feb 03* 528-535
VUV laser-induced refr.-index change and birefr., std. opt. fibers. *Chen, K.P.*, +, *J-LT Sep 03* 1969-1977

Birefringence; cf. Flow birefringence**Bismuth compounds**

Optical elec.-power sens. by use of one BGO cryst. *Changsheng Li*, +, *J-LT May 2003* 1328-1333

Blood flow measurement

integrated laser blood flowmeter by micromachining and surface mount techs. *Higurashi, E.*, +, *J-LT Mar 03* 591-595

Bosons; cf. Photons**Boundary element methods**

anal. of holey opt. fibers, BEM. *Ning Guan*, +, *J-LT Aug 03* 1787-1792
integr. opt. waveguides, vectorial BEM anal. *Tao Lu*, +, *J-LT Aug 03* 1793-1807

Boundary value problems

comput. opt. waveguides, discontinuous refr. index profiles, spectral collocation method, domain decomp., efficient method. *Chia-Chien Huang*, +, *J-LT Oct 03* 2284-2296

Bragg gratings

correction to "Design of two-section DBR laser operating at ITU frequencies only by grating current tuning" (Jun 03 1524-1530). *Seeds, A.J.*, +, *J-LT Dec 03* 3477
distortion in angle-modulated links induced by ripple in fiber-Bragg grating reflectance and delay characteristics. *Ulmer, T.G.*, *J-LT Dec 03* 3226-3236
failure mode anal. of photonic components on InP using low-coherence reflectometry, case of burned DBR lasers. *Plouzenec, C.*, +, *J-LT Dec 03* 3434-3440
high-resolution photonics-based interference suppression filter with wide passband. *Chan, E.H.W.*, +, *J-LT Dec 03* 3144-3149
microwave photonic photorefractive smart filters. *Vourc'h, E.*, +, *J-LT Dec 03* 3135-3143
microwave V-I transmission matrix formalism for anal. of photonic ccts.: application to fiber Bragg gratings. *Capmany, J.*, +, *J-LT Dec 03* 3125-3134
multiple beam fiber-optic beamformer with binary array of delay lines. *Granieri, S.*, +, *J-LT Dec 03* (110) Dec 03 3262-3272
planar reflection grating wavelength filters in Si. *Luff, B.J.*, +, *J-LT Dec 03*

Brillouin scattering

Brillouin freq. shift and long. acoustic wave, silica opt. fiber, triple-layered struct. *Jaewang Yu*, +, *J-LT Aug 03* 1779-1786
Efficiency improvement of opt. fiber wavelength converter without spectral spread using sync. phase/FM. *Torii, K.*, +, *J-LT Apr 03* 1039-1045
fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554
shift, dispers. -shifted fiber and annealing effect, wide-range temp. depend. *Yongqian Li*, +, *J-LT Jul 03* 1663-1667

Broadband communication

DWDM/SCM self-healing archit. for broad-band subscriber networks. *Wen-Piao Lin*, +, *J-LT Feb 03* 319-328
Measurements for enhanced bandwidth perform. over 62.5- μ m multimode fiber in SW LAN. *Schlager, J.B.*, +, *J-LT May 2003* 1276-1285
opt. carrier supply module, flattened opt. multicarrier gener., sinusoidal amplif. and phase hybrid modulation. *Fujiwara, M.*, +, *J-LT Nov 03* 2705-2714
opt. networks, bandwidth-efficient shared-path protection. *Yizhi Xiong*, +, *J-LT Feb 03* 365-371

Broadband networks

optimal design for ultra-broad-band amplifier. *Liu, X.*, +, *J-LT Dec 03* 3446-3455

Buffer memories

FLBM-based all-opt. packet switch, exact/approx. anal. modeling. *Singh, Y.N.*, +, *J-LT Mar 03* 719-726

C

Cable TV

Analog laser predistortion for multiservice radio-over-fiber systs. *Roselli, L.*, +, *J-LT May 2003* 1211-1223
Wavelength conversion of SCM sigs. using SOA, theory, expts., and appls. *Capmany, J.*, +, *J-LT Apr 03* 961-972
WDM analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03* 500-505

CAD

sys.-level modeling and simulation of 10G optoelectronic interconnect. *Kahrs, M.*, +, *J-LT Dec 03* 3244-3256

Calibration

MEMS-based opt. cross-connect, time-multiplexed sigs., parallel sig. anal./switch optimiz. *Pau, S.*, +, *J-LT Mar 03* 609-613

- polariz.-depend. loss, accurate spectral charactn. *Craig, R.M.*, *J-LT Feb 03* 432-437
- Capacitance**
Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031
- Capacitors; cf.** Ferroelectric capacitors
- Carrier sense multiaccess**
all-opt. wavel.-division multiplexed packet nets., collision avoidance. *Elaine Wong*, +, *J-LT Nov 03* 2652-2660
fiber-to-the-desk appl., ethernet-based pass. opt. LAN. *Radovanovic, I.*, +, *J-LT Nov 03* 2534-2545
- Ceramics**
feed-forward continuous and complete polariz. control, PLZT rotatable-variable waveplate and inline polarimeter. *Hirabayashi, K.*, +, *J-LT Sep 03* 1920-1932
- Cerenkov radiation**
Fourier domain planar waveguide Cerenkov SHG. *Hoekstra, H.J.W.M.*, +, *J-LT Jan 03* 299-304
- Channel allocation**
capacity anal. for WDM fiber-radio backbones with star-tree and ring architecture incorporating wavelength interleaving. *Lim, C.*, +, *J-LT Dec 03* 3308-3315
- Chaos**
high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03* 750-758
- Charge carrier density**
opt. amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919
- Charge carrier lifetime**
WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485
- Charge carrier mobility**
APD impulse response, ionization PDF. *Tan, C.H.*, +, *J-LT Jan 03* 155-159
- Charge coupled image sensors**
single-mode opt. fiber arrays, high-precision charactn. *Bernussi, A.A.*, +, *J-LT Jun 03* 1557-1561
- Chebyshev approximation**
3D opt. waveguides, vector modes, modified imaginary dist. BPM. *Chamorro-Posada, P.*, *J-LT Mar 03* 862-867
- Chemical vapor deposition; cf.** Plasma CVD
- Chirp modulation**
customized ultrahigh repetition rate pulse seqs., superimposed fiber Bragg gratings, gener. *Azana, J.*, +, *J-LT Jun 03* 1490-1498
electrically tunable dispers. compensator, fixed center wavel., fiber Bragg grating. *Ngo, N.Q.*, +, *J-LT Jun 03* 1568-1575
gain-flattening filter design, rotationally symmetric crossed gratings. *Lobo, A.E.*, +, *J-LT Sep 03* 2084-2088
Generation of complex microwave/MM-wave pulses using dispersion and Kerr effect in opt. fiber systs. *Levinson, O.*, +, *J-LT May 2003* 1179-1187
High-perform. all-fiber Fabry-Perot filters with superimposed chirped Bragg gratings. *Slavik, R.*, +, *J-LT Apr 03* 1059-1065
Impact of dispersion fluct. on 40-Gb/s dispersion-managed lightwave systs. *Poutrina, E.*, +, *J-LT Apr 03* 990-996
LiNbO₃ modulator based 10-Gb/s transmitters, SOA booster amps. *Yonggyoo Kim*, +, *J-LT Feb 03* 476-481
modulator chirp, assessing perform. implications of group delay ripple of dispers. compensating fiber Bragg gratings. *Cartledge, J.C.*, +, *J-LT Jul 03* 1621-1628
opt. label encoding, electroabsorption modulators and investig. of chirp props. *Xu, L.*, +, *J-LT Aug 03* 1763-1769
Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937
- Chaos communication**
chaos communication syst. based on Er-doped fiber ring laser; effect of transmission fiber. *Zhang, F.*, +, *J-LT Dec 03* 3334-3343
- Circuit theory; cf.** Network topology
- Circuit topology**
Physical/logical topol. design of large-scale opt. networks. *Yufeng Xin*, +, *J-LT Apr 03* 904-915
Survivable WDM mesh networks. *Ramamurthy, S.*, +, *J-LT Apr 03* 870-883
- Circular waveguides**
cylindrical antiresonant reflecting optical waveguide using transfer matrix; design and anal. *Tee, C.W.*, +, *J-LT Dec 03* 3379-3386
- Claddings; cf.** Optical fiber cladding
- Cladding techniques; cf.** Optical fiber cladding
- Clocks; cf.** Atomic clocks
- CMOS integrated circuits**
adaptive CMOS predistortion linearizer for FO links. *Sadhwani, R.*, +, *J-LT Dec 03* 3180-3193
photonic A/D conversion using low-temperature-grown GaAs MSM switches integrated with Si-CMOS. *Urata, R.*, +, *J-LT Dec 03* 3104-3115
- Coating techniques; cf.** Epitaxial growth
- Code division multiaccess**
alg. congruent codes used 2D OCDMA syst., research. *Tao Pu*, +, *J-LT Nov 03* 2557-2564
asynchronous opt. CDMA systs., opt. orthogonal codes, large crosscorrelation. *Chi-Shun Weng*, +, *J-LT Mar 03* 735-742
direct-detect. opt. CDMA receiver, interf. estim. and double opt. hardlimiters. *Wakafuji, K.*, +, *J-LT Oct 03* 2182-2188
embedded transm. scheme, PPM signaling, symmetric error-correcting codes for opt. CDMA. *Kamakura, K.*, +, *J-LT Jul 03* 1601-1611
free space opt. PPM CDMA systs. *Ohtsuki, T.*, *J-LT Feb 03* 406-411
multimedia networks, opt. CDMA with time hopping/power control. *Yashima, H.*, +, *J-LT Mar 03* 695-702
multiweight unipolar codes for multimedia opt. CDMA appls., pairwise balanced designs, design. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1850-1856
opt. CDMA random access protocols with/without pretransmission coord. *Shalaby, H.M.H.*, *J-LT Nov 03* 2455-2462
opt. orthogonal codes for incoherent opt. CDMA systs., combinat. constr. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1869-1875
wavel./time (W/T) matrix codes for opt. CDMA, design and perform. anal. *Mendez, A.J.*, +, *J-LT Nov 03* 2524-2533
- Code division multiple access**
BER improvement effect of optical delay insertion in ROF ubiquitous antenna architecture for wireless CDMA syst. *Ohtsuki, H.*, +, *J-LT Dec 03* 3203-3208
direct optical switching CDMA syst. for FO radio highway networks. *Tsukamoto, K.*, +, *J-LT Dec 03* 3209-3220
- Codes**
asynchronous opt. CDMA systs., opt. orthogonal codes, large crosscorrelation. *Chi-Shun Weng*, +, *J-LT Mar 03* 735-742
- Codes; cf.** Golay codes; Reed-Solomon codes
- Coherence**
coherence of pulsed microwave signals carried by two-frequency solid state lasers. *Lai, N.D.*, +, *J-LT Dec 03* 3037-3042
- Communication channels**
adaptive min. MSE controlled PLC opt. equalizer for chromatic dispers. compensation. *Secondini, M.*, +, *J-LT Oct 03* 2322-2331
broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K.*, +, *J-LT Jan 03* 25-31
buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. *Allen, C.T.*, +, *J-LT Jan 03* 79-86
Channel drop filter using, single defect in 2-D photonic cryst. slab-defect engng. with respect to polariz. mode and ratio of emissions from upper and lower sides. *Asano, T.*, +, *J-LT May 2003* 1370-1376
Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang*, +, *J-LT Apr 03* 953-960
Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009
freq.-interleaved DWDM mm-wave radio-on-fiber systs., DEMUX, arrayed-waveguide grating. *Toda, H.*, +, *J-LT Aug 03* 1735-1741
Influence of Bragg gratings phase mismatch in Mach-Zehnder-based ADM. *Mechin, D.*, +, *J-LT May 2003* 1411-1416
lasers, wavel. stabilizer. *Colace, L.*, +, *J-LT Aug 03* 1749-1757
LiNbO₃ tunable spectral slicing waveguide filter design, DWDM appls. *Taylor, H.F.*, *J-LT Mar 03* 837-847
NRZ Gb/s opt. transm., higher order polariz.-mode dispersion compensation. *Lorenzetto, G.*, +, *J-LT Feb 03* 424-431
phase-modulated 40-Gb/s RZ transm., ghost-pulse gener. suppression. *Kanaev, A.V.*, +, *J-LT Jun 03* 1486-1489
polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. *Bononi, A.*, +, *J-LT Sep 03* 1903-1913

- Protecting multicast sessions in WDM opt. mesh networks. *Singhal, N.K.*, +, *J-LT Apr 03* 884-892
- simultaneous transm. of data and digital broadcast video service, bidirectional WDM PON. *Son, E.S.*, +, *J-LT Aug 03* 1723-1727
- single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V.*, +, *J-LT Jan 03* 61-68
- Some enabling techs. for polariz. mode dispersion compensation. *Sandel, D.*, +, *J-LT May 2003* 1198-1210
- Super-DWDM transm. technol. in zero-dispersion region employing distributed Raman amplif. *Suzuki, H.*, +, *J-LT Apr 03* 973-981
- sync. WDM systs., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu*, +, *J-LT Jan 03* 40-53
- transient dynamics of EDFA pumped by 1480- and 980-nm lasers, anal. and control. *Tian, C.*, +, *J-LT Aug 03* 1728-1734
- wavel. channel data rewrite, saturated SOA modulator for WDM nets., centralized light sources. *Takesue, H.*, +, *J-LT Nov 03* 2546-2556
- Wavelength conversion of SCM sigs. using SOA, theory, expts., and appls. *Capmany, J.*, +, *J-LT Apr 03* 961-972
- wavelength multiplexed fiber Bragg gratings, network sens. appls. *Abad, S.*, +, *J-LT Jan 03* 127-131
- wide geographical opt. fiber transport networks, Gb/s transm. *Matera, F.*, +, *J-LT Feb 03* 456-465
- Communication standards**
- Analog laser predistortion for multiservice radio-over-fiber systs. *Roselli, L.*, +, *J-LT May 2003* 1211-1223
- automatically switched opt. nets., PNNI-based control plane. *Sanchez-Lopez, S.*, +, *J-LT Nov 03* 2673-2682
- Measurements for enhanced bandwidth perform. over 62.5- μ m multimode fiber in SW LAN. *Schlager, J.B.*, +, *J-LT May 2003* 1276-1285
- Modeling and simul. of next-generation multimode fiber links. *Pepeljugoski, P.*, +, *J-LT May 2003* 1242-1255
- Communication switching**
- efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzwow, M.*, +, *J-LT Jun 03* 1435-1455
- implement. of label-controlled arrayed waveguide packet router, opt. IM/FSK coding tech. *Vlachos, K.*, +, *J-LT Nov 03* 2617-2628
- tree-shared multicast opt. burst-switched WDM networks. *Myoungki Jeong*, +, *J-LT Jan 03* 13-24
- Communication system control**
- create bandwidth-abundant IP nets., photonic MPLS router. *Watanabe, A.*, +, *J-LT Nov 03* 2851-2862
- Survivable WDM mesh networks. *Ramamurthy, S.*, +, *J-LT Apr 03* 870-883
- Communication system operations and management**
- 3rd.-order dispers. and sideband instabil., single-channel opt. fiber transm. by midway opt. phase conjug. employing higher order dispers. mgt. *Kaewplung, P.*, +, *J-LT Jun 03* 1465-1473
- broad-band opt. networks, bandwidth-efficient shared-path protection. *Yizhi Xiong*, +, *J-LT Feb 03* 365-371
- Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang*, +, *J-LT Apr 03* 953-960
- Investigation of syst. upgradability over installed fiber-optic cable using 40-Gb/s WDM sigs. toward multiterabit opt. networks. *Otani, T.*, +, *J-LT Apr 03* 947-952
- single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V.*, +, *J-LT Jan 03* 61-68
- survivable opt. mesh nets., control and mgt. protocols. *Assi, C.*, +, *J-LT Nov 03* 2638-2651
- wavelength-flexible network nodes, MEMS-based OXCs and wavelength conversion. *Nuzman, C.*, +, *J-LT Mar 03* 648-663
- Communication system reliability**
- all-opt. mesh nets., path-based flooding, restoration. *Sun-il Kim*, +, *J-LT Nov 03* 2605-2616
- broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K.*, +, *J-LT Jan 03* 25-31
- buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. *Allen, C.T.*, +, *J-LT Jan 03* 79-86
- Development of syst. spec. for laser-optimized 50- μ m multimode fiber for multigigabit SW LANs. *Pepeljugoski, P.*, +, *J-LT May 2003* 1256-1275
- DWDM/SCM self-healing archit. for broad-band subscriber networks. *Wen-Piao Lin*, +, *J-LT Feb 03* 319-328
- HORNET archit., demons. and syst. anal. *White, I.M.*, +, *J-LT Nov 03* 2489-2498
- joint multilayer protection, packet-over-opt. nets., cost effectiveness. *Chunxiao Chigan*, +, *J-LT Nov 03* 2694-2704
- Monitoring opt. network perform. degrad. due to amp. noise. *Kilper, D.C.*, +, *J-LT May 2003* 1171-1178
- nets., shared risk link groups, trap avoidance and protection schemes. *Dahai Xu*, +, *J-LT Nov 03* 2683-2693
- opt. nets., differentiated reliab. *Tacca, M.*, +, *J-LT Nov 03* 2576-2586
- Performance failure anal. of EDFA cascades in opt. DWDM packet-switched networks. *Araci, I.E.*, +, *J-LT May 2003* 1156-1163
- Protecting multicast sessions in WDM opt. mesh networks. *Singhal, N.K.*, +, *J-LT Apr 03* 884-892
- survivable multicast sessions against single link failures, opt. WDM mesh nets., provisioning. *Singhal, N.K.*, +, *J-LT Nov 03* 2587-2594
- survivable opt. mesh nets., control and mgt. protocols. *Assi, C.*, +, *J-LT Nov 03* 2638-2651
- Survivable WDM mesh networks. *Ramamurthy, S.*, +, *J-LT Apr 03* 870-883
- Communication system routing**
- 1 $\times$ 2 all-opt. packet switch, all-opt. sig. proc. methods. *Dorren, H.J.S.*, +, *J-LT Jan 03* 2-12
- all-opt. mesh nets., path-based flooding, restoration. *Sun-il Kim*, +, *J-LT Nov 03* 2605-2616
- all-opt. packet-switched networks, arbitrary topol., self-routing address scheme. *Yuan, X.C.*, +, *J-LT Feb 03* 329-339
- all-opt. packet switching routers, opt. label swapping and 2R regeneration for scalable opt. label switching net. appls., demons. *Min Yong Jeon*, +, *J-LT Nov 03* 2723-2733
- Array interconnection for rearrangeable 2-D MEMS opt. switch. *Teck Yoong Chai*, +, *J-LT May 2003* 1134-1140
- blocking perform. anal. of WDM all-opt. nets., effective method. *Jintao Xiong*, +, *J-LT Jun 03* 1421-1434
- cct., burst, packet switchings, versatile opt. code-based MPLS. *Kitayama, K.-I.*, +, *J-LT Nov 03* 2753-2764
- composite-packet-switched WDM net., expt. demons. *Boroditsky, M.*, +, *J-LT Aug 03* 1717-1722
- GMPLS nets., routing and protection. *Elwalid, A.*, +, *J-LT Nov 03* 2828-2838
- implement. of label-controlled arrayed waveguide packet router, opt. IM/FSK coding tech. *Vlachos, K.*, +, *J-LT Nov 03* 2617-2628
- joint multilayer protection, packet-over-opt. nets., cost effectiveness. *Chunxiao Chigan*, +, *J-LT Nov 03* 2694-2704
- multiwavelength opt. packet-switched network, contention-resoln. schemes. *Shun Yao*, +, *J-LT Mar 03* 672-683
- nets., shared risk link groups, trap avoidance and protection schemes. *Dahai Xu*, +, *J-LT Nov 03* 2683-2693
- N $\times$ N multiwavelength opt. cross-connect based on tunable FBGs. *Nam Su Moon*, +, *J-LT Mar 03* 703-718
- optically assisted Internet routing, arrays of dynamically reconfigurable FBG-based correlators. *Hauer, M.C.*, +, *J-LT Nov 03* 2765-2778
- opt. nets., differentiated reliab. *Tacca, M.*, +, *J-LT Nov 03* 2576-2586
- opt. reconfigurability and restoration, integr. opt. cross-connects, realizing advantages. *Strand, J.*, +, *J-LT Nov 03* 2871-2882
- packet's time-to-live (TTL) field and subsequent dropping of zero-TTL packet, all-opt. decrementing. *McGehean, J.E.*, +, *J-LT Nov 03* 2746-2752
- Protecting multicast sessions in WDM opt. mesh networks. *Singhal, N.K.*, +, *J-LT Apr 03* 884-892
- simultaneous label swapping and wavel. conversion of multiple independent WDM channels, all-opt. MPLS net., PPLN waveguides, wavel. converters. *Gurkan, D.*, +, *J-LT Nov 03* 2739-2745
- ultrafast time-domain technol. and appl., all-opt. sig. proc. *Vlachos, K.*, +, *J-LT Sep 03* 1857-1868
- ultra-high-capacity IP routers, opt. switch fabrics. *Gripp, J.*, +, *J-LT Nov 03* 2839-2850
- versatile holographic liq.-cryst. wavel.-selective opt. switch, design and perform. *Fracasso, B.*, +, *J-LT Oct 03* 2405-2411
- wavelength-flexible network nodes, MEMS-based OXCs and wavelength conversion. *Nuzman, C.*, +, *J-LT Mar 03* 648-663
- WDM networks, wavelength converter placement, optim. model. *Suixiang Gao*, +, *J-LT Mar 03* 684-694
- Communication system signaling**
- automatically switched opt. nets., PNNI-based control plane. *Sanchez-Lopez, S.*, +, *J-LT Nov 03* 2673-2682

- IP/MPLS, ASON/GMPLS test bed of IST project LION. *Cavazzoni, C.*, +, *J-LT Nov 03 2791-2803*
- sig. distortion and crosstalk penalties induced by opt. filters, opt. nets. *Downie, J.D.*, +, *J-LT Sep 03 1876-1886*
- wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03 1612-1620*
- Communication system software**
opt. transm. systs., constraint-based design. *Alicherry, M.*, +, *J-LT Nov 03 2499-2510*
- Communication system traffic**
all-opt. mesh nets., path-based flooding, restoration. *Sun-il Kim*, +, *J-LT Nov 03 2605-2616*
- blocking perform. anal. of WDM all-opt. nets., effective method. *Jintao Xiong*, +, *J-LT Jun 03 1421-1434*
- broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K.*, +, *J-LT Jan 03 25-31*
- cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03 182-197*
- data and voice integrat. over DWDM MAN. *Stavdas, A.*, +, *J-LT Feb 03 372-383*
- efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzwow, M.*, +, *J-LT Jun 03 1435-1455*
- GMPLS nets., routing and protection. *Elwalid, A.*, +, *J-LT Nov 03 2828-2838*
- Multilayer soln. for path provisioning in new-generation opt./MPLS networks. *Sabella, R.*, +, *J-LT May 2003 1141-1155*
- multimedia streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03 2123-2144*
- opt. nets., differentiated reliab. *Tacca, M.*, +, *J-LT Nov 03 2576-2586*
- opt. packet switching net., enhanced edge routers, end-to-end contention resolu. schemes. *Fei Xue*, +, *J-LT Nov 03 2595-2604*
- tree-shared multicast opt. burst-switched WDM networks. *Myoungki Jeong*, +, *J-LT Jan 03 13-24*
- wide geographical opt. fiber transport networks, Gb/s transm. *Matera, F.*, +, *J-LT Feb 03 456-465*
- Compensation**
2-sect. DBR laser operating, ITU freqs. only by grating current tuning, design. *Feies, V.I.*, +, *J-LT Jun 03 1524-1530*
- 8 × 10-Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03 1499-1503*
- Analog laser predistortion for multiservice radio-over-fiber systs. *Roselli, L.*, +, *J-LT May 2003 1211-1223*
- dispers. compensating Raman amps., pump reflectors for increased effc. *Nicholson, J.W.*, *J-LT Aug 03 1758-1762*
- electrically tunable dispers. compensator, fixed center wavel., fiber Bragg grating. *Ngo, N.Q.*, +, *J-LT Jun 03 1568-1575*
- high-channel-count chromatic dispers. compensation, phased-only sampled fiber Bragg gratings. *Hongpu Li*, +, *J-LT Sep 03 2074-2083*
- modulator chirp, assessing perform. implications of group delay ripple of dispers. compensating fiber Bragg gratings. *Cartledge, J.C.*, +, *J-LT Jul 03 1621-1628*
- NRZ Gb/s opt. transm., higher order polariz.-mode dispersion compensation. *Lorenzetto, G.*, +, *J-LT Feb 03 424-431*
- opt. fibers, polariz. mode dispersion emulation/inversion. *Kogelnik, H.*, +, *J-LT Feb 03 482-495*
- photonic cryst. fibers for dispers. -related appls., design. *Lin-Ping Shen*, +, *J-LT Jul 03 1644-1651*
- polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. *Bononi, A.*, +, *J-LT Sep 03 1903-1913*
- prog. group -delay module, binary polariz. switching. *Lianshan Yan*, +, *J-LT Jul 03 1676-1684*
- Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. *Phua, P.B.*, +, *J-LT Apr 03 982-989*
- s-band Er-doped fiber amps., multistage config. „sign, charactn., gain tilt compensation. *Ono, H.*, +, *J-LT Oct 03 2240-2246*
- Some enabling techs. for polariz. mode dispersion compensation. *Sandel, D.*, +, *J-LT May 2003 1198-1210*
- Third-order dispersion compensation using, phase modulator. *Hellstrom, E.*, +, *J-LT May 2003 1188-1197*
- wide geographical opt. fiber transport networks, Gb/s transm. *Matera, F.*, +, *J-LT Feb 03 456-465*
- Computer applications; cf. CAD**
- Computer instructions**
optically assisted Internet routing, arrays of dynamically reconfigurable FBG-based correlators. *Hauer, M.C.*, +, *J-LT Nov 03 2765-2778*
- Computer interfaces; cf. Network interfaces**
- Computer network management**
customer-controlled and -managed opt. nets. *St Arnaud, B.*, +, *J-LT Nov 03 2804-2810*
- IP/MPLS, ASON/GMPLS test bed of IST project LION. *Cavazzoni, C.*, +, *J-LT Nov 03 2791-2803*
- Computer network reliability**
opt. bidirectional path switched ring networks for photonic IP networks. *Hayashi, M.*, +, *J-LT Feb 03 356-364*
- Computer networks; cf. Computer network management; Computer network reliability; Internetworking; Local area networks; Metropolitan area networks; Wide area networks**
- Conducting films**
Packaging, fiber Bragg grating with metal coating for athermal design. *Yu-Lung Lo*, +, *J-LT May 2003 1377-1383*
- Control of specific variables; cf. Optical variables control**
- Control theory; cf. Compensation**
- Convergence**
erratum to "A genetic algorithm-based methodology for optimizing multiservice convergence in a metro WDM network" (May 03 1114-1133). *Hyo-Sik Yang*, +, *J-LT Nov 03 2953-2954*
- Convergence; cf. Convergence of numerical methods**
- Convergence of numerical methods**
3D opt. waveguides, vector modes, modified imaginary dist. BPM. *Chamorro-Posada, P.*, *J-LT Mar 03 862-867*
- Converters**
rigorous beam propagation anal. of tapered spot-size converters in deep-etched semiconductor waveguides. *Rahman, B.M.A.*, +, *J-LT Dec 03 3392-3398*
- Converters; cf. Driver circuits**
- Corundum; cf. Sapphire**
- Coupled mode analysis**
anal. of corrugated long-period gratings in slab waveguides and their polarization dependence. *Liu, Q.*, +, *J-LT Dec 03 3399-3405*
- Characterization of stress-applied polariz.-maintaining (PM) fiber through photoelastic tomography. *Yongwoo Park*, +, *J-LT Apr 03 997-1004*
- switching devices, spatial and spectral resolu. combining photonic cryst. and MOEMS structs. *Letartre, X.*, +, *J-LT Jul 03 1691-1699*
- Crosstalk**
crosstalk, noise, and stability anal. of DWDM channels generated by injection locking techniques. *Cai, B.*, +, *J-LT Dec 03 3029-3036*
- Crosstalk; cf. Optical crosstalk**
- Cryptography**
high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03 750-758*
- Crystal growth; cf. Epitaxial growth**
- Current density**
2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03 1685-1690*
- CVD**
3D microoptical bench by bulk micromachining, opt. scanner. *Sasaki, M.*, +, *J-LT Mar 03 602-608*
- D**
- Data communication**
Development of syst. spec. for laser-optimized 50-μm multimode fiber for multigigabit SW LANs. *Pepeljugoski, P.*, +, *J-LT May 2003 1256-1275*
- Data conversion; cf. Analog-digital conversion**
- Decoding**
long-haul opt. commun. syst. FEC, low-dens. parity check code based. *Vasic, B.*, +, *J-LT Feb 03 438-446*
- multiweight unipolar codes for multimedia opt. CDMA appls., pairwise balanced designs, design. *Djordjevic, I.B.*, +, *J-LT Sep 03 1850-1856*
- Decoding; cf. Maximum likelihood decoding**
- Delay effects**
buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. *Allen, C.T.*, +, *J-LT Jan 03 79-86*

- Development of syst. spec. for laser-optimized 50- μ m multimode fiber for multigigabit SW LANs. *Pepeljugoski, P.*, +, *J-LT May 2003* 1256-1275
freq. depend. of DGD, concatenated single-mode fiber systs., anal. form. *Yoshida-Dierolf, M.*, +, *J-LT Oct 2003* 2217-2223
modulator chirp, assessing perform. implications of group delay ripple of dispers. compensating fiber Bragg gratings. *Cartledge, J.C.*, +, *J-LT Jul 03* 1621-1628
prog. group-delay module, binary polariz. switching. *Lianshan Yan*, +, *J-LT Jul 03* 1676-1684
simulating polariz. effects, recirculating fiber loops, loop-sync. polariz. scrambling tech. *Yu, Q.*, +, *J-LT Jul 03* 1593-1600
Some enabling techs. for polariz. mode dispersion compensation. *Sandel, D.*, +, *J-LT May 2003* 1198-1210
- Delay lines; cf.** Optical delay lines
- Demodulation**
high-temp. appls., sin gle-cryst. sapphire fiber-based strain sens. *Hai Xiao*, +, *J-LT Oct 03* 2276-2283
- Demultiplexing**
2-stage Sagnac DEMUX. *Parolari, P.*, +, *J-LT Aug 03* 1808-1812
all-opt. TDM data DEMUX, 80 Gb/s, significant timing jitter tolerance, fiber Bragg grating rect. pulse switching technol. *Ju Han Lee*, +, *J-LT Nov 03* 2518-2523
dense WDM mm-wave-band radio-on-fiber sig. transm., photonic downconversion. *Kuri, T.*, +, *J-LT Jun 03* 1510-1517
designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi*, +, *J-LT Oct 03* 2314-2321
dyn. spectral equalizer, free-space dispers. optics combined, PDLC spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073
freq.-interleaved DWDM mm-wave radio-on-fiber systs., DEMUX, arrayed-waveguide grating. *Toda, H.*, +, *J-LT Aug 03* 1735-1741
logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583
N $\times$ several tens of Gb/s WDM transm., integr.-optic dispers. slope equalizer. *Takiguchi, K.*, +, *J-LT Nov 03* 2463-2469
sig. distortion and crosstalk penalties induced by opt. filters, opt. nets. *Downie, J.D.*, +, *J-LT Sep 03* 1876-1886
wavelength multiplexed fiber Bragg gratings, network sens. appls. *Abad, S.*, +, *J-LT Jan 03* 127-131
- Design engineering**
design of large receiver and transmitter arrays for OE-VLSI applications. *Venditti, M.B.*, +, *J-LT Dec 03* 3406-3416
optimal design for ultra-broad-band amplifier. *Liu, X.*, +, *J-LT Dec 03* 3446-3455
- Dielectric polarization**
E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304
- Dielectric properties; cf.** Capacitance; Dielectric polarization; Permittivity
- Dielectric waveguides; cf.** Optical waveguides
- Differential equations; cf.** Partial differential equations
- Differential phase shift keying**
coded PSK for fiber-optic commun., spectral eff. *Kramer, G.*, +, *J-LT Oct 03* 2438-2445
dense WDM mm-wave-band radio-on-fiber sig. transm., photonic downconversion. *Kuri, T.*, +, *J-LT Jun 03* 1510-1517
dispersion-managed soliton syst. perform., span length random vars. *Chongjin Xie*, +, *J-LT Mar 03* 769-775
DPSK and OOK WDM transm., transoceanic dists. and their perform. degradations, nonlin. phase noise, comparative study. *Mizuochi, T.*, +, *J-LT Sep 03* 1933-1943
implement. of label-controlled arrayed waveguide packet router, opt. IM/FSK coding tech. *Vlachos, K.*, +, *J-LT Nov 03* 2617-2628
laser freq. offset, direct-detect. DPSK/DQPSK systs., robustness. *Hoon Kim*, +, *J-LT Sep 03* 1887-1891
mm-wave data-modulated opt. sig. generation using opt. injection PLL. *Johansson, L.A.*, +, *J-LT Feb 03* 511-520
WDM direct-detect. DPSK systs., cross-PM-induced nonlin. phase noise. *Hoon Kim*, *J-LT Aug 03* 1770-1774
- Diffraction gratings; cf.** Bragg gratings; Holographic gratings
- Diffusion processes**
APD impulse response, ionization PDF. *Tan, C.H.*, +, *J-LT Jan 03* 155-159
LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245
- Digital simulation; cf.** Discrete event simulation
- Digital systems; cf.** Real-time systems
- Directed graphs**
WDM networks, wavelength converter placement, optim. model. *Suixiang Gao*, +, *J-LT Mar 03* 684-694
- Discrete event simulation**
multimedia streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03* 2123-2144
- Disperse systems; cf.** Aerosols; Polymer dispersed liquid crystals
- Dispersion (wave)**
microwave photonic photorefractive smart filters. *Vourc'h, E.*, +, *J-LT Dec 03* 3135-3143
- Dispersion (wave); cf.** Optical dispersion
- Displacement measurement**
Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820
- Distance measurement**
microoptical systs., modular fab. concept for commercial appl. *Mohr, J.A.*, +, *J-LT Mar 03* 643-647
- Distortion; cf.** Nonlinear distortion
- Distributed amplifiers**
technique for measuring longitudinal distribution of Raman gain characteristics in optical fibers. *Toge, K.*, +, *J-LT Dec 03* 3349-3354
- Distributed Bragg reflector lasers**
2-sect. DBR laser operating, ITU freqs. only by grating current tuning, design. *Feies, V.I.*, +, *J-LT Jun 03* 1524-1530
Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019
failure mode anal. of photonic components on InP using low-coherence reflectometry, case of burned DBR lasers. *Plouzenec, C.*, +, *J-LT Dec 03* 3434-3440
GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
modeling high-power Er³⁺-Yb³⁺ codoped fiber lasers. *Yahel, E.*, +, *J-LT Sep 03* 2044-2052
opt. amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919
sampled-grating DBR laser-based analog optical transmitters. *Johansson, L.A.*, +, *J-LT Dec 03* 2968-2976
ultra-high-capacity IP routers, opt. switch fabrics. *Gripp, J.*, +, *J-LT Nov 03* 2839-2850
- Distributed Bragg reflectors**
opto-electronic millimeter-wave synth. using optical frequency comb generator, optically injection locked lasers, and uni-traveling-carrier photodiode. *Fukushima, S.*, +, *J-LT Dec 03* 3043-3051
- Distributed Bragg reflectors; cf.** Distributed Bragg reflector lasers
- Distributed control**
Survivable WDM mesh networks. *Ramamurthy, S.*, +, *J-LT Apr 03* 870-883
- Distributed feedback lasers**
high-speed directly modulated Fabry-Perot/DFB spot-size-converted lasers, uncooled telecomm. environ. *Klotzkin, D.*, +, *J-LT Jan 03* 69-78
laser freq. offset, direct-detect. DPSK/DQPSK systs., robustness. *Hoon Kim*, +, *J-LT Sep 03* 1887-1891
- Distributed parameter networks; cf.** Distributed amplifiers
- Doping profiles**
chaos communication syst. based on Er-doped fiber ring laser; effect of transmission fiber. *Zhang, F.*, +, *J-LT Dec 03* 3334-3343
- Driver circuits**
interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280
- Dynamic programming; cf.** Integer programming
- Dynamic response; cf.** Transient response

E

Eigenvalues and eigenfunctions

- 2D stratified media, slab waveguide perfectly matched layer modes determ. *Gaal, S.B.*, +, *J-LT Jan 03* 293-298
imaging errors of AWG, calc. *Klekamp, A.*, +, *J-LT Sep 03* 1978-1986
opt. fibers, polariz. mode dispersion emulation/inversion. *Kogelnik, H.*, +, *J-LT Feb 03* 482-495

- weakly guiding opt. fibers, closed WKB formulas. *Paiano, G.*, +, *J-LT Jan 03* 286-292
- Elasticity; cf.** Photoelasticity
- Electric actuators; cf.** Microactuators
- Electrical contacts; cf.** Ohmic contacts
- Electric current; cf.** Current density
- Electric fields**
E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304
- Electric immittance; cf.** Electric impedance
- Electric impedance**
rectangular waveguide output uni-traveling-carrier photodiode module for high-power photonic F-band mm-wave generation. *Ito, H.*, +, *J-LT Dec 03* 3456-3462
- Electric variables control; cf.** Power control
- Electric variables measurement; cf.** Attenuation measurement; Gain measurement; Power measurement
- Electroabsorption**
anal. and characterization of traveling-wave electrode in electroabsorption modulator for radio-on-fiber application. *Lim, J.*, +, *J-LT Dec 03* 3004-3010
analog characterization of low-voltage MQW traveling-wave electroabsorption modulators. *Liu, B.*, +, *J-LT Dec 03* 3011-3019
digital and analog appls., opt. intens. modulatr. *Li, G.L.*, +, *J-LT Sep 03* 2010-2030
opt. label encoding, electroabsorption modulators and investig. of chirp props. *Xu, L.*, +, *J-LT Aug 03* 1763-1769
sampled-grating DBR laser-based analog optical transmitters. *Johansson, L.A.*, +, *J-LT Dec 03* 2968-2976
simultaneous 3-band modulation and FO transmission of 2.5-Gb/s baseband, microwave-, and 60-GHz-band signals on single wavelength. *Ikeda, K.*, +, *J-LT Dec 03* 3194-3202
- Electrodes**
anal. and characterization of traveling-wave electrode in electroabsorption modulator for radio-on-fiber application. *Lim, J.*, +, *J-LT Dec 03* 3004-3010
Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A.*, +, *J-LT Apr 03* 1071-1082
E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304
Polymer-based 1×6 thermooptic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang*, +, *J-LT Apr 03* 1053-1058
- Electromagnetic analysis**
Raman gain coeff., scaling. *Rottwitz, K.*, +, *J-LT Jul 03* 1652-1662
- Electromagnetic devices**
optical MEMs and its future trends (special section). *J-LT Mar 03* 582-671
optical MEMs and its future trends (special section intro.). *Lin, L.Y.*, +, *J-LT Mar 03* 582-583
- Electromagnetic fields**
time-varying medium layered media, Volterra integral eqn. EM field investig. method. *Fedotov, F.V.*, +, *J-LT Jan 03* 305-314
- Electromagnetic induction**
stabilizing optoelectronic microwave oscillator with photonic filters. *Stekalov, D.*, +, *J-LT Dec 03* 3052-3061
- Electromagnetic interference**
magnetic near-field measurements over LSI package pins by fiber-edge magneto-optic probe. *Iwanami, M.*, +, *J-LT Dec 03* 3273-3281
- Electromagnetic shielding**
plastic packaging, low-cost opt. transceiver modules, effective EM shielding. *Tzong-Lin Wu*, +, *J-LT Jun 03* 1536-1543
- Electromagnetic surface waves**
Modeling and simul. of next-generation multimode fiber links. *Pepeljugin, P.*, +, *J-LT May 2003* 1242-1255
- Electromagnetism; cf.** Electromagnetic induction
- Electron device noise; cf.** Semiconductor device noise
- Electron device testing; cf.** Semiconductor device testing
- Electronic engineering computing; cf.** SPICE
- Electro-optical devices**
single-chip integrated EO polymer photonic RF phase shifter array. *Han, J.*, +, *J-LT Dec 03* 3257-3261
- Electro-optical devices; cf.** Electro-optical modulation
- Electro-optical effects; cf.** Electroabsorption; Pockels effect
- Electro-optical modulation**
multisectional modeling of high-speed EO modulators integrated in microwave cct. CAD environment. *Pirola, M.*, +, *J-LT Dec 03* 2989-2996
- Electrooptic devices**
feed-forward continuous and complete polariz. control, PLZT rotatable-variable waveplate and inline polarimeter. *Hirabayashi, K.*, +, *J-LT Sep 03* 1920-1932
- Electrooptic filters**
electrooptical long-period gratings, reconfigurable p-shifted/Mach-Zehnder bandpass filters. *Kulishov, M.*, +, *J-LT Mar 03* 854-861
polariz.-depend. loss, accurate spectral charactn. *Craig, R.M.*, *J-LT Feb 03* 432-437
- Electrooptic modulation**
 1×2 all-opt. packet switch, all-opt. sig. proc. methods. *Dorren, H.J.S.*, +, *J-LT Jan 03* 2-12
cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197
Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A.*, +, *J-LT Apr 03* 1071-1082
digital and analog appls., opt. intens. modulators. *Li, G.L.*, +, *J-LT Sep 03* 2010-2030
digital-microwave link, opt. generated elec.-modulation formats. *Candelas, P.*, +, *J-LT Feb 03* 496-499
dual Mach-Zehnder modulator opt. transmitters, high-speed data, pulse-carver alignment. *Sinsky, J.H.*, *J-LT Feb 03* 412-423
endless polariz. control algm., adjustable lin. retarders, fixed axes. *Martinelli, M.*, +, *J-LT Sep 03* 2089-2096
E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304
fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. *Jeehoon Han*, +, *J-LT Jun 03* 1504-1509
high-output-power polariz.-insensitive SOA, WDM syst. switching elements. *Morito, K.*, +, *J-LT Jan 03* 176-181
high-speed directly modulated Fabry-Perot/DFB spot-size-converted lasers, uncooled telecomm. environ. *Klotzkin, D.*, +, *J-LT Jan 03* 69-78
high-speed electrooptic modulator charactn., opt. spectrum anal. *Yongqiang Shi*, +, *J-LT Oct 03* 2358-2367
LiNbO₃ modulator based 10-Gb/s transmitters, SOA booster amps. *Yonggyoo Kim*, +, *J-LT Feb 03* 476-481
Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098
opt. carrier supply module, flattened opt. multicarrier gener., sinusoidal amplif. and phase hybrid modulation. *Fujiwara, M.*, +, *J-LT Nov 03* 2705-2714
opt. label encoding, electroabsorption modulators and investig. of chirp props. *Xu, L.*, +, *J-LT Aug 03* 1763-1769
opt. props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A.*, +, *J-LT Aug 03* 1813-1819
Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235
SOI submicrometer-size waveguide devices, electrooptic modulation. *Barrios, C.A.*, +, *J-LT Oct 03* 2332-2339
sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060
thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R.*, +, *J-LT Aug 03* 1820-1827
wavel. channel data rewrite, saturated SOA modulator for WDM nets., centralized light sources. *Takesue, H.*, +, *J-LT Nov 03* 2546-2556
WDM analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03* 500-505
- Electrooptic switches**
2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690
broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K.*, +, *J-LT Jan 03* 25-31
fiber arrays, liq.-cryst. polariz. stabilizers. *Hirabayashi, K.*, +, *J-LT Oct 03* 2162-2171
versatile holographic liq.-cryst. wavel.-selective opt. switch, design and perform. *Fracasso, B.*, +, *J-LT Oct 03* 2405-2411
- Electrostatics; cf.** Electric fields
- Emission; cf.** Spontaneous emission; Superradiance

Encoding

multiweight unipolar codes for multimedia opt. CDMA appls., pairwise balanced designs, design. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1850-1856
 opt. orthogonal codes for incoherent opt. CDMA systs., combinat. constr. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1869-1875
 Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820

Encoding; cf. Codes; Modulation coding

Energy states; cf. Band structure

Engineering; cf. Design engineering

Environmental factors

Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019

Epitaxial growth

low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S.*, +, *J-LT Jan 03* 211-217

Equalizers

control syst. for opt. delay-line cct. used reconfigurable gain equalizer, design and anal. *Schlipf, T.R.*, +, *J-LT Sep 03* 1944-1952
 dyn. spectral equalizer, free-space dispers. optics combined, PDLC spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073
 gain-flattening filter design, rotationally symmetric crossed gratings. *Lobo, A.E.*, +, *J-LT Sep 03* 2084-2088
 Nx several tens of Gb/s WDM transm., integr.-optic dispers. slope equalizer. *Takiguchi, K.*, +, *J-LT Nov 03* 2463-2469
 regenerative all-opt. wavel. converter, transparent demons., 42 nodes and 16800 km, nonblocking all-opt. cross connect. *Leuthold, J.*, +, *J-LT Nov 03* 2863-2870
 single-mode fiber PMD, one-input two-output channel representation. *Hong Chen*, +, *J-LT Mar 03* 743-749

Equalizers; cf. Adaptive equalizers

Equations; cf. Integral equations

Equivalent circuits

crit. slowing down, bistable S-SEED. *Clare, B.A.*, +, *J-LT Nov 03* 2883-2890

Erbium

Distributed fiber Raman amps. with localized loss. *Seung Kwan Kim*, +, *J-LT May 2003* 1286-1293
 Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao*, +, *J-LT Jan 03* 160-169
 Er-doped superfluorescent fiber source with 0.5-ppm long-term mean wavelength stability. *Park, H.G.*, +, *J-LT Dec 03* 3427-3433
 Er³⁺-doped photonic cryst. fiber amplif. props., full vector finite-element modal formulation. *Cucinotta, A.*, +, *J-LT Mar 03* 782-788
 Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369
 modeling high-power Er³⁺-Yb³⁺ codoped fiber lasers. *Yahel, E.*, +, *J-LT Sep 03* 2044-2052
 opt. amps., index contrast scaling. *Saini, S.*, +, *J-LT Oct 03* 2368-2376
 s-band Er-doped fiber amps., multistage config. sign, charactn., gain tilt compensation. *Ono, H.*, +, *J-LT Oct 03* 2240-2246
 Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349
 Spectral hole burning in erbium-doped fiber amps. *Bolshtyansky, M.*, *J-LT Apr 03* 1032-1038
 transient dynamics of EDFA pumped by 1480- and 980-nm lasers, anal. and control. *Tian, C.*, +, *J-LT Aug 03* 1728-1734
 wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03* 1612-1620

Error analysis

asynchronous amplit. histogram eval. of NRZ sig., chromatic dispers. depend. *Shake, I.*, +, *J-LT Oct 03* 2154-2161
 asynchronous opt. CDMA systs., opt. orthogonal codes, large crosscorrelation. *Chi-Shun Weng*, +, *J-LT Mar 03* 735-742
 cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197
 Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A.*, +, *J-LT Apr 03* 1071-1082
 direct-detect. opt. CDMA receiver, interf. estim. and double opt. hardlimiters. *Wakafuji, K.*, +, *J-LT Oct 03* 2182-2188
 embedded transm. scheme, PPM signaling, symmetric error-correcting codes for opt. CDMA. *Kamakura, K.*, +, *J-LT Jul 03* 1601-1611

Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031
 free space opt. PPM CDMA systs. *Ohtsuki, T.*, *J-LT Feb 03* 406-411
 in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. *Zalevsky, Z.*, +, *J-LT Nov 03* 2734-2738
 multimedia networks, opt. CDMA with time hopping/power control. *Yashima, H.*, +, *J-LT Mar 03* 695-702
 nanosatellite cluster-detector array receiver laser commun. *Bushuev, D.*, +, *J-LT Feb 03* 447-455
 probab., presence of in-band crosstalk noise, WDM nets., accurate estim. *Kamalakis, T.*, +, *J-LT Oct 03* 2172-2181
 wavel./time (W/T) matrix codes for opt. CDMA, design and perform. anal. *Mendez, A.J.*, +, *J-LT Nov 03* 2524-2533

Error correction; cf. Forward error correction

Error correction coding

coded PSK for fiber-optic commun., spectral effic. *Kramer, G.*, +, *J-LT Oct 03* 2438-2445
 embedded transm. scheme, PPM signaling, symmetric error-correcting codes for opt. CDMA. *Kamakura, K.*, +, *J-LT Jul 03* 1601-1611

Errors; cf. Measurement errors

Error statistics

anal. of penalty due to LF intensity modulation in optical transmission systs. *Baik, J.-S.*, +, *J-LT Dec 03* 3300-3307
 BER improvement effect of optical delay insertion in ROF ubiquitous antenna architecture for wireless CDMA syst. *Ohtsuki, H.*, +, *J-LT Dec 03* 3203-3208
 correction to "Evaluating the error probability in lightwave systems with chromatic dispersion, arbitrary pulse shape" (Nov 00 1493-1503). *Powell, O.*, *J-LT Mar 03* 868

Etching

EM micromirror array with single-cryst. Si mirror plate and Al spring. *Chang-Hyeon Ji*, +, *J-LT Mar 03* 584-590
 opt. props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A.*, +, *J-LT Aug 03* 1813-1819
 Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

Etching; cf. Sputter etching

Evolutionary computation; cf. Genetic algorithms

Excimer lasers

F₂ laser radiation, planar lightwave cct. photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148
 std. fibers, DUV laser radiation, photosensitization. *Chen, K.P.*, +, *J-LT Sep 03* 1958-1968

F**Fabry-Perot interferometers**

extrinsic Fabry-Perot interferometric opt. fiber sens., strain meas. *Sang-Hoon Kim*, +, *J-LT Mar 03* 797-804
 High-perform. all-fiber Fabry-Perot filters with superimposed chirped Bragg gratings. *Slavik, R.*, +, *J-LT Apr 03* 1059-1065
 high-temp. appls., single-cryst. sapphire fiber-based strain sens. *Hai Xiao*, +, *J-LT Oct 03* 2276-2283

Fabry-Perot resonators

amps., noise. *Yamamoto, Y.*, +, *J-LT Nov 03* 2895-2915
 extrinsic Fabry-Perot interferometric opt. fiber sens., strain meas. *Sang-Hoon Kim*, +, *J-LT Mar 03* 797-804
 Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098
 measurement of gain in pump diode lasers using low-coherence source and synchronous detection. *Troger, J.*, *J-LT Dec 03* 3441-3445
 reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M.*, +, *J-LT Sep 03* 2031-2043

Failure analysis

Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019
 failure mode anal. of photonic components on InP using low-coherence reflectometry, case of burned DBR lasers. *Plouzenec, C.*, +, *J-LT Dec 03* 3434-3440

Faraday effect

Optical elec.-power sens. by use of one BGO cryst. *Changsheng Li*, +, *J-LT May 2003* 1328-1333

- performance evaluation of fiber-edge MO probe. *Wakana, S.*, +, *J-LT Dec 03* 3292-3299
- polariz. depend. of OLCR, act. Faraday rotator. *Takada, K.*, *JLT Nov 03* 2916-2922
- Fatigue**
moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. *Mrotek, J.L.*, +, *J-LT Aug 03* 1775-1778
- FTD methods**
ARC design optim., space mapping tech. *Ning-Ning Feng*, +, *J-LT Jan 03* 281-285
BPM for TE- and TM-wave anal. *Shibayama, J.*, +, *J-LT Jul 03* 1709-1715
photonic devices by gen. space mapping tech., modeling and simul. *Ning-Ning Feng*, +, *J-LT Jun 03* 1562-1567
planar-photonic crysts., beam steering, superprism to supercollimator. *Lijun Wu*, +, *J-LT Feb 03* 561-566
time-varying medium layered media, Volterra integral eqn. EM field investig. method. *Fedotov, F.V.*, +, *J-LT Jan 03* 305-314
- Feedback; cf.** Optical feedback
- Feedback lasers**
Brillouin fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554
high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03* 750-758
telecomm. lasers, wavel. stabilizer. *Colace, L.*, +, *J-LT Aug 03* 1749-1757
- Ferroelectric capacitors**
application of ultrafast photonic technique to study polarization switching dynamics of thin-film ferroelectric capacitors. *Li, J.*, +, *J-LT Dec 03* 3282-3291
- Ferroelectric devices; cf.** Ferroelectric capacitors
- Ferromagnetic resonance**
performance evaluation of fiber-edge MO probe. *Wakana, S.*, +, *J-LT Dec 03* 3292-3299
- Fiber lase**
chaos communication syst. based on Er-doped fiber ring laser; effect of transmission fiber. *Zhang, F.*, +, *J-LT Dec 03* 3334-3343
- Fiber lasers**
microwave V-I transmission matrix formalism for anal. of photonic ccts.: application to fiber Bragg gratings. *Capmany, J.*, +, *J-LT Dec 03* 3125-3134
- Fiber lasers; cf.** Optical fiber amplifiers
- Fibers; cf.** Optical fibers
- Filled polymers; cf.** Polymer dispersed liquid crystals
- Films; cf.** Optical films
- Filters**
harmonic suppressed photonic microwave filter. *Vidal, B.*, +, *J-LT Dec 03* 3150-3154
planar reflection grating wavelength filters in Si. *Luff, B.J.*, +, *J-LT Dec 03*
- Filters; cf.** High-pass filters; Low-pass filters; Notch filters; Optical filters
- Finite difference methods**
3D opt. waveguides, vector modes, modified imaginary dist. BPM. *Chamorro-Posada, P.*, *J-LT Mar 03* 862-867
cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. *Jeong, H.*, +, *J-LT Aug 03* 1838-1845
fiber fuse phenom., single-mode opt. fibers, simul. *Shuto, Y.*, +, *J-LT Nov 03* 2511-2517
photonic cryst. fibers for dispers.-related appls., design. *Lin-Ping Shen*, +, *J-LT Jul 03* 1644-1651
- Finite different methods**
erratum to, "Single-mode condition for silicon rib waveguides" (Oct 02 1851-1855). *Powell, O.*, *J-LT Mar 03* 868
- Finite element analysis**
rigorous beam propagation anal. of tapered spot-size converters in deep-etched semiconductor waveguides. *Rahman, B.M.A.*, +, *J-LT Dec 03* 3392-3398
- Finite element methods**
Er³⁺-doped photonic cryst. fiber amplif. props., full vector finite-element modal formulation. *Cucinotta, A.*, +, *J-LT Mar 03* 782-788
integr. opt. mirrors, planar waveguide technol., anal. and design. *Wiechmann, S.*, +, *J-LT Jun 03* 1584-1591
opt. props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A.*, +, *J-LT Aug 03* 1813-1819
photonic cryst. fiber, birefr., magneto-opt. method/FEA. *Peyrilloux, A.*, +, *J-LT Feb 03* 536-539
- Raman amplif. props., triangular photonic cryst. fibers. *Fuochi, M.*, +, *J-LT Oct 03* 2247-2254
slanted sidewall high index contrast planar silica waveguides, polariz. crosstalk. *Somasiri, N.*, +, *J-LT Jan 03* 54-60
transverse anisotropic media, finite-element vector beam propag. method. *da Silva, J.P.*, +, *J-LT Feb 03* 567-576
- FIR digital filters**
control syst. for opt. delay-line cct. used reconfigurable gain equalizer, design and anal. *Schlipf, T.R.*, +, *J-LT Sep 03* 1944-1952
- Flip-chip devices**
substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytsis, E.N.*, +, *J-LT Oct 03* 2382-2394
- Flip-flops**
1 × 2 all-opt. packet switch, all-opt. sig. proc. methods. *Dorren, H.J.S.*, +, *J-LT Jan 03* 2-12
- Flow birefringence**
analytical treatment of randomly birefringent periodically spun fibers. *Pizzinat, A.*, +, *J-LT Dec 03* 3355-3363
- Flow graphs; cf.** Signal flow graphs
- Flow measurement; cf.** Blood flow measurement
- Forward error correction**
2D opt.-data links, on-chip parallel FEC appl. *Faucher, J.*, +, *J-LT Feb 03* 466-475
coded PSK for fiber-optic commun., spectral effic. *Kramer, G.*, +, *J-LT Oct 03* 2438-2445
free space opt. PPM CDMA systs. *Ohtsuki, T.*, *J-LT Feb 03* 406-411
long-haul opt. commun. syst. FEC, low-dens. parity check code based. *Vasic, B.*, +, *J-LT Feb 03* 438-446
opt.-fiber commun., ASE noise dominated, turbo code decoder perform. *Yi Cai*, +, *J-LT Mar 03* 727-734
Super-DWDM transm. technol. in zero-dispersion region employing distributed Raman amplif. *Suzuki, H.*, +, *J-LT Apr 03* 973-981
- Fracture; cf.** Fatigue
- Frequency division multiaccess**
multimedia streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03* 2123-2144
- Frequency-domain analysis; cf.** Time-frequency analysis
- Frequency hop communication**
wavel./time (W/T) matrix codes for opt. CDMA, design and perform. anal. *Mendez, A.J.*, +, *J-LT Nov 03* 2524-2533
- Frequency modulation**
distortion in angle-modulated links induced by ripple in fiber-Bragg grating reflectance and delay characteristics. *Ulmer, T.G.*, *J-LT Dec 03* 3226-3236
Efficiency improvement of opt. fiber wavelength converter without spectral spread using sync. phase/FM. *Torii, K.*, +, *J-LT Apr 03* 1039-1045
mm-wave data-modulated opt. sig. generation using opt. injection PLL. *Johansson, L.A.*, +, *J-LT Feb 03* 511-520
- Frequency modulation; cf.** Frequency shift keying
- Frequency response**
reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M.*, +, *J-LT Sep 03* 2031-2043
- Frequency shift keying**
DWDM/SCM self-healing archit. for broad-band subscriber networks. *Wen-Piao Lin*, +, *J-LT Feb 03* 319-328
implement. of label-controlled arrayed waveguide packet router, opt. IM/FSK coding tech. *Vlachos, K.*, +, *J-LT Nov 03* 2617-2628
- Functional analysis; cf.** Harmonic analysis
- Function approximation; cf.** Chebyshev approximation
- Function generators**
photonic assisted generation of arbitrary mm-wave and microwave EM waveforms via direct space-to-time optical pulse shaping. *McKinney, J.D.*, +, *J-LT Dec 03* 3020-3028
- Functions; cf.** Bessel functions

G

Gain measurement

measurement of gain in pump diode lasers using low-coherence source and synchronous detection. *Troger, J.*, *J-LT Dec 03* 3441-3445

- pump-wavelength dependence of Raman gain in single-mode optical fibers. *Newbury, N.R.*, *J-LT Dec 03* 3364-3373
- Gallium compounds**
 2×2 3-dB multimode interf. couplers via access waveguide width, optimizing imbalance and loss. *Hill, M.T.*, +, *J-LT Oct 03* 2305-2313
 Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031
 GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
 GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S.*, +, *J-LT Jan 03* 170-175
 InGaAsP-InP 1.55- μm lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M.*, +, *J-LT Jan 03* 269-274
 optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H.*, +, *J-LT Jun 03* 1544-1548
- Gaussian noise**
 burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575
 opt.-fiber commun., ASE noise dominated, turbo code decoder perform. *Yi Cai*, +, *J-LT Mar 03* 727-734
- Gaussian processes; cf.** Gaussian noise
- Genetic algorithms**
 erratum to "A genetic algorithm-based methodology for optimizing multiservice convergence in a metro WDM network" (May 03 1114-1133). *Hyo-Sik Yang*, +, *J-LT Nov 03* 2953-2954
 optimal design for ultra-broad-band amplifier. *Liu, X.*, +, *J-LT Dec 03* 3446-3455
- Germanium compounds**
 Raman gain coeff., scaling. *Rottwitt, K.*, +, *J-LT Jul 03* 1652-1662
- Glass**
 10-W Raman fiber lasers, 1248 nm, phosphosilicate fibers. *Xiong, Z.*, +, *J-LT Oct 03* 2377-2381
 Raman gain coeff., scaling. *Rottwitt, K.*, +, *J-LT Jul 03* 1652-1662
 Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349
- Glass; cf.** Optical glass
- Golay codes**
 2D opt.-data links, on-chip parallel FEC appl. *Faucher, J.*, +, *J-LT Feb 03* 466-475
- Graded index optics**
 perfluorinated GRIN plastic opt. fiber mode coupling estim. *Golowich, S.E.*, +, *J-LT Jan 03* 111-121
 SCH VCSELs, reson.-wavelength control/opt.-confine. anal. *Wei-Choon Ng*, +, *J-LT Feb 03* 555-560
 Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R.*, +, *J-LT Apr 03* 1046-1052
- Graph theory; cf.** Directed graphs
- Gratings**
 2-sect. DBR laser operating, ITU freqs. only by grating current tuning, design. *Feies, V.I.*, +, *J-LT Jun 03* 1524-1530
 cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. *Jeong, H.*, +, *J-LT Aug 03* 1838-1845
 Cross-orthogonality between guided and radiation modes at opt. waveguide discontinuities. *Ramadan, T.A.*, *J-LT May 2003* 1394-1404
 designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi*, +, *J-LT Oct 03* 2314-2321
 electrooptical long-period gratings, reconfigurable p-shifted/Mach-Zehnder bandpass filters. *Kulishov, M.*, +, *J-LT Mar 03* 854-861
 FDTD BPM for TE- and TM-wave anal. *Shibayama, J.*, +, *J-LT Jul 03* 1709-1715
 gain-flattening filter design, rotationally symmetric crossed gratings. *Lobo, A.E.*, +, *J-LT Sep 03* 2084-2088
 glass photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03* 246-253
 grating-assisted codirectional fiber coupler design. *Brenne, J.K.*, +, *J-LT Jan 03* 254-263
 hybrid glasses for microoptics, photolithographic proc. *Karkkainen, A.H.O.*, +, *J-LT Mar 03* 614-623
 Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369
 LiNbO₃ static-strain -induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245
 long-period fiber gratings, arbitrary azimuthal/radial refr. index vars., transmittance modelling. *Anemogiannis, E.*, +, *J-LT Jan 03* 218-227
 long period fiber gratings fab., refr. index/temp. sens. appls. *Allsop, T.*, +, *J-LT Jan 03* 264-268
 long-period gratings, fiber cladding mode sensitivity charactn. *Besley, J.A.*, +, *J-LT Mar 03* 848-853
 materials, nonlin. photosensitive response, grating writing model. *Besley, J.A.*, +, *J-LT Oct 03* 2421-2428
 Novel fiber-optic sens. based on long-period fiber gratings written by HF CO₂ laser pulses. *Yun-Jiang Rao*, +, *J-LT May 2003* 1320-1327
 Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820
- Green function**
 imaging errors of AWG, calc. *Klekamp, A.*, +, *J-LT Sep 03* 1978-1986

H

Harmonic analysis

- harmonic suppressed photonic microwave filter. *Vidal, B.*, +, *J-LT Dec 03* 3150-3154
 microsectional modeling of high-speed EO modulators integrated in microwave cct. CAD environment. *Pirola, M.*, +, *J-LT Dec 03* 2989-2996

Harmonics; cf. Harmonics suppression**Harmonics suppression**

- harmonic suppressed photonic microwave filter. *Vidal, B.*, +, *J-LT Dec 03* 3150-3154

Heat treatment; cf. Annealing**Helmholtz equations**

- weakly guiding opt. fibers, closed WKB formulas. *Paiano, G.*, +, *J-LT Jan 03* 286-292

Hemodynamics; cf. Blood flow measurement**Heterodyne detection**

- optical heterodyne detection technique for densely multiplexed mm-wave band radio -on-fiber systs. *Kuri, T.*, +, *J-LT Dec 03* 3167-3179

Heterojunction bipolar transistors

- Nonlinearity anal. and optim. of HBTs for opt. mixer designs. *Langlois, P.J.*, +, *J-LT May 2003* 1350-1357

High-pass filters

- Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. *Phua, P.B.*, +, *J-LT Apr 03* 982-989

High-speed optical techniques

- application of ultrafast photonic technique to study polarization switching dynamics of thin -film ferroelectric capacitors. *Li, J.*, +, *J-LT Dec 03* 3282-3291
 photonically assisted generation of arbitrary mm-wave and microwave EM waveforms via direct space-to-time optical pulse shaping. *McKinney, J.D.*, +, *J-LT Dec 03* 3020-3028
 real-time detection of femtosecond optical pulse sequences via time-to-space conversion in lightwave communications band. *Chung, J.-H.*, +, *J-LT Dec 03* 3323-3333

High-speed techniques

- analog characterization of low-voltage MQW traveling-wave electroabsorption modulators. *Liu, B.*, +, *J-LT Dec 03* 3011-3019

High-speed techniques; cf. High-speed optical techniques**High-temperature techniques**

- appls., single-cryst. sapphire fiber-based strain sens. *Hai Xiao*, +, *J-LT Oct 03* 2276-2283

Hilbert transforms

- arrayed waveguide grating based opt. devices, phase error meas. *Wei Chen*, +, *J-LT Jan 03* 198-205

Holographic gratings

- dyn. spectral equalizer, free-space dispers. optics combined, PDL spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073
 substr.-embedded/flip-chip -bonded photodetector polymer-based opt. interconnects. *Glytis, E.N.*, +, *J-LT Oct 03* 2382-2394

Holographic optical components

- versatile holographic liq.-cryst. wavel.-selective opt. switch, design and perform. *Fracasso, B.*, +, *J-LT Oct 03* 2405-2411

Holographic optical elements; cf. Holographic gratings

Humidity

Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie, +, J-LT Apr 03 1013-1019*
 moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. *Mrotek, J.L., +, J-LT Aug 03 1775-1778*

Hydrogen compounds; cf. Water**Hysteresis**

Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao, +, J-LT Jan 03 160-169*
 thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R., +, J-LT Aug 03 1820-1827*

I**IIR digital filters**

logarithmic wavel. demultiplexers. *Cincotti, G., +, J-LT Jun 03 1576-1583*

Image processing

single-mode opt. fiber arrays, high-precision charactn. *Bernussi, A.A., +, J-LT Jun 03 1557-1561*

Image processing; cf. Image recognition**Image recognition**

single-mode opt. fiber arrays, high-precision charactn. *Bernussi, A.A., +, J-LT Jun 03 1557-1561*

Imaging; cf. Microscopy**Impedance**

opt. props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A., +, J-LT Aug 03 1813-1819*

Impedance matching

anal. and characterization of traveling-wave electrode in electroabsorption modulator for radio-on-fiber application. *Lim, J., +, J-LT Dec 03 3004-3010*

Indium compounds

2×2 3-dB multimode interf. couplers via access waveguide width, optimizing imbalance and loss. *Hill, M.T., +, J-LT Oct 03 2305-2313*
 InGaAsP-InP 1.55- μm lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M., +, J-LT Jan 03 269-274*
 optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H., +, J-LT Jun 03 1544-1548*
 substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytsis, E.N., +, J-LT Oct 03 2382-2394*

Inductors

reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M., +, J-LT Sep 03 2031-2043*

Information networks; cf. Internet**Information rates**

low-dens. WDM line systs. for long-haul nets., merits. *Gerstel, O., +, J-LT Nov 03 2470-2475*
 Survivable WDM mesh networks. *Ramamurthy, S., +, J-LT Apr 03 870-883*

Information theory; cf. Decoding; Encoding; Error statistics**Infrared spectroscopy**

Four-wave mixing between pump and sig. in distributed Raman amp. *Tsu-Te Kung, +, J-LT May 2003 1164-1170*

Inorganic compounds; cf. Aluminum compounds; Bismuth compounds; Gallium compounds; Germanium compounds; Indium compounds; Lead compounds; Phosphorus compounds; Silicon compounds; Tellurium compounds**Integer programming**

broad-band opt. networks, bandwidth-efficient shared-path protection. *Yizhi Xiong, +, J-LT Feb 03 365-371*
 joint multilayer protection, packet-over-opt. nets., cost effectiveness. *Chunxiao Chigan, +, J-LT Nov 03 2694-2704*

Integral equations

ellipt. whispering-gallery-mode microdisk waveguide filters, tuning. *Boriskina, S.V., +, J-LT Sep 03 1987-1995*
 Er³⁺-doped photonic cryst. fiber amplif. props., full vector finite-element modal formulation. *Cucinotta, A., +, J-LT Mar 03 782-788*
 time-varying medium layered media, Volterra integral eqn. EM field investig. method. *Fedotov, F.V., +, J-LT Jan 03 305-314*

Integrated circuit packaging

interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y., +, J-LT Jan 03 275-280*

Integrated circuits; cf. Integrated optoelectronics**Integrated circuit technology; cf. Integrated circuit packaging****Integrated optics**

2-mode interf. photonic waveguide switch. *Baojun Li, +, J-LT Jul 03 1685-1690*

2×2 3-dB multimode interf. couplers via access waveguide width, optimizing imbalance and loss. *Hill, M.T., +, J-LT Oct 03 2305-2313*

Cross-orthogonality between guided and radiation modes at opt. waveguide discontinuities. *Ramadan, T.A., J-LT May 2003 1394-1404*

direct UV writing, variable opt. attenuator fabricated. *Svalgaard, M., +, J-LT Sep 03 2097-2103*

E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang, +, J-LT Oct 03 2297-2304*

Experimental and num. study of SiON microresonators with air and polymer cladding. *Klunder, D.J.W., +, J-LT Apr 03 1099-1110*

failure mode anal. of photonic components on InP using low-coherence reflectometry, case of burned DBR lasers. *Plouzenec, C., +, J-LT Dec 03 3434-3440*

fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. *Jeehoon Han, +, J-LT Jun 03 1504-1509*

GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T., +, J-LT Mar 03 596-601*

glass photonic device fab. by fs laser pulse direct writing. *Florea, C., +, J-LT Jan 03 246-253*

guided opt. wave, Gaussian approx., spot-size conversion. *Hashimoto, T., +, J-LT Oct 03 2340-2351*

High-isolation photonic microwave mixer/link for wideband sig. proc. and transm. *Yongqiang Shi, +, J-LT May 2003 1224-1232*

high-speed electrooptic modulator charactn., opt. spectrum anal. *Yongqiang Shi, +, J-LT Oct 03 2358-2367*

InGaAsP-InP 1.55- μm lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M., +, J-LT Jan 03 269-274*

laser blood flowmeter by micromachining and surface mount techs. *Higurashi, E., +, J-LT Mar 03 591-595*

LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang, +, J-LT Jan 03 236-245*

LiNbO₃ tunable spectral slicing waveguide filter design, DWDM appls. *Taylor, H.F., J-LT Mar 03 837-847*

low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S., +, J-LT Jan 03 211-217*

multiwavelength opt. packet-switched network, contention-resoln. schemes. *Shun Yao, +, J-LT Mar 03 672-683*

optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H., +, J-LT Jun 03 1544-1548*

opt. reconfigurability and restoration, integr. opt. cross-connects, realizing advantages. *Strand, J., +, J-LT Nov 03 2871-2882*

Polymer-based 1×6 thermo-optic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang, +, J-LT Apr 03 1053-1058*

racetrack microring resonator/multimode interf. coupler, static spectral charact. response. *Caruso, L., +, J-LT Jan 03 206-210*

Si-based light modulator design/testing/fab. *Sciuto, A., +, J-LT Jan 03 228-235*

SOI submicrometer-size waveguide devices, electrooptic modulation. *Barrios, C.A., +, J-LT Oct 03 2332-2339*

Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W., +, J-LT May 2003 1339-1349*

switching devices, spatial and spectral resoln. combining photonic cryst. and MOEMS structs. *Letartre, X., +, J-LT Jul 03 1691-1699*

thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R., +, J-LT Aug 03 1820-1827*

time-domain beam-propag. method. *Bravo-Roger, L.L., +, J-LT Feb 03 577*

Integrated optics; cf. Optical planar waveguides**Integrated optoelectronics**

10- μm -thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi, +, J-LT Jun 03 1531-1535*

2D opt.-data links, on-chip parallel FEC appl. *Faucher, J., +, J-LT Feb 03 466-475*

adaptive min. MSE controlled PLC opt. equalizer for chromatic dispers. compensation. *Secondini, M., +, J-LT Oct 03 2322-2331*

- control syst. for opt. delay-line cct. used reconfigurable gain equalizer, design and anal. *Schlipf, T.R.*, +, *J-LT Sep 03* 1944-1952
- distributed fiber Bragg grating sens., arrayed waveguide grating fast opt. wavelength interrogator. *Sano, Y.*, +, *J-LT Jan 03* 132-139
- germano-silica planar waveguides, 157-nm F₂ laser radiation photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148
- High-isolation photonic microwave mixer/link for wideband sig. proc. and transm. *Yongqiang Shi*, +, *J-LT May 2003* 1224-1232
- interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280
- low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S.*, +, *J-LT Jan 03* 211-217
- Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098
- multichannel receptacle PLC modules, waveguide-fiber connector. *Asakawa, S.*, +, *J-LT Mar 03* 821-830
- Nonlinearity anal. and optim. of HBTs for opt. mixer designs. *Langlois, P.J.*, +, *J-LT May 2003* 1350-1357
- Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235
- Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820
- substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytis, E.N.*, +, *J-LT Oct 03* 2382-2394
- switching devices, spatial and spectral resolu. combining photonic cryst. and MOEMS structs. *Letartre, X.*, +, *J-LT Jul 03* 1691-1699
- Intelligent sensors**
distributed fiber Bragg grating sens., arrayed waveguide grating fast opt. wavelength interrogator. *Sano, Y.*, +, *J-LT Jan 03* 132-139
- Intensity modulation**
anal. of penalty due to LF intensity modulation in optical transmission systs. *Baik, J.-S.*, +, *J-LT Dec 03* 3300-3307
- Interconnections; cf.** Optical interconnections
- Interface phenomena; cf.** Metal-semiconductor-metal structures
- Interference**
lumped and distrib. Raman amps., double Rayleigh scatt. noise. *Parolari, P.*, +, *J-LT Oct 03* 2224-2228
- Interference (signal); cf.** Crosstalk; Electromagnetic interference; Intersymbol interference
- Interference suppression**
high-resolution photonic-based interference suppression filter with wide passband. *Chan, E.H.W.*, +, *J-LT Dec 03* 3144-3149
- Intermodulation; cf.** Intermodulation distortion
- Intermodulation distortion**
adaptive CMOS predistortion linearizer for FO links. *Sadhwani, R.*, +, *J-LT Dec 03* 3180-3193
- mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. *Lim, C.*, +, *J-LT Oct 03* 2203-2210
- Internet**
all-opt. switch fabrics, generalized multiprotocol label switching. *Papadimitriou, G.I.*, +, *J-LT Feb 03* 384-405
- efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzw, M.*, +, *J-LT Jun 03* 1435-1455
- opt. nets., differentiated reliab. *Tacca, M.*, +, *J-LT Nov 03* 2576-2586
- opt. packet switching net., enhanced edge routers, end-to-end contention resolu. schemes. *Fei Xue*, +, *J-LT Nov 03* 2595-2604
- Internetworking**
IP/MPLS, ASON/GMPLS test bed of IST project LION. *Cavazzoni, C.*, +, *J-LT Nov 03* 2791-2803
- Intersymbol interference**
arbitrary opt. filtered opt. preamplified systs., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95
- burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575
- Development of syst. spec. for laser-optimized 50- μ m multimode fiber for multigigabit SW LANs. *Pepeljugoski, P.*, +, *J-LT May 2003* 1256-1275
- opt. preamplified receiver perform., VSB filtering, sig. modulation formats. *Jaehoon Lee*, +, *J-LT Feb 03* 521-527
- single-mode fiber PMD, one-input two-output channel representation. *Hong Chen*, +, *J-LT Mar 03* 743-749
- Inverse problems**
grating-assisted codirectional fiber coupler design. *Brenne, J.K.*, +, *J-LT Jan 03* 254-263

Ion implantation

Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031

Iterative methods

paraxial approx. for stable and efficient reflective BPM, preconditioner. *Ning-Ning Feng*, +, *J-LT Sep 03* 1996-2001

J**Jitter**

in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. *Zalevsky, Z.*, +, *J-LT Nov 03* 2734-2738

Joining processes; cf. Soldering

L**Lanthanum compounds**

feed-forward continuous and complete polariz. control, PLZT rotatable-variable waveplate and inline polarimeter. *Hirabayashi, K.*, +, *J-LT Sep 03* 1920-1932

thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R.*, +, *J-LT Aug 03* 1820-1827

Laplace equations

opt. props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A.*, +, *J-LT Aug 03* 1813-1819

Large scale integration

magnetic near-field measurements over LSI package pins by fiber-edge magneto-optic probe. *Iwanami, M.*, +, *J-LT Dec 03* 3273-3281

Laser ablation; cf. Pulsed laser deposition

Laser accessories

Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031

InGaAsP-InP 1.55- μ m lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M.*, +, *J-LT Jan 03* 269-274

Laser arrays; cf. Semiconductor laser arrays

Laser beams

As-Se IR-transmitting glass fiber opt. loss, heating effects. *Nguyen, V.Q.*, +, *J-LT Jan 03* 122-126

out-of-plane fiber-laser alignment, presence of init. nonplanar misalignments, intell. automation method. *Mondal, S.K.*, +, *J-LT Sep 03* 2061-2066

Laser biomedical applications

integrated laser blood flowmeter by micromachining and surface mount techs. *Higurashi, E.*, +, *J-LT Mar 03* 591-595

Laser deposition; cf. Pulsed laser deposition

Laser machining

two-photon laser precision microfab., nanophotonic/opt. MEMS appls. *Hong-Bo Sun*, +, *J-LT Mar 03* 624-633

Laser materials-processing applications

glass photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03* 246-253

Novel fiber-optic sens. based on long-period fiber gratings written by HF CO₂ laser pulses. *Yun-Jiang Rao*, +, *J-LT May 2003* 1320-1327

SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836

std. fibers, DUV laser radiation, photosensitization. *Chen, K.P.*, +, *J-LT Sep 03* 1958-1968

Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

two-photon laser precision microfab., nanophotonic/opt. MEMS appls. *Hong-Bo Sun*, +, *J-LT Mar 03* 624-633

VUV laser-induced refr.-index change and birefr., std. opt. fibers. *Chen, K.P.*, +, *J-LT Sep 03* 1969-1977

Laser measurements

Spectral hole burning in erbium-doped fiber amps. *Bolshtyansky, M.*, *J-LT Apr 03* 1032-1038

Laser modes

Brillouin fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554

widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634

Laser noise

8 × 10-Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03* 1499-1503

amps., noise. *Yamamoto, Y.*, +, *J-LT Nov 03* 2895-2915

cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197

direct-detect. transm. syst. perform., laser noise influence. *Morgado, J.A.P.*, +, *J-LT Mar 03* 759-768

dispers. compensating Raman amps., pump reflectors for increased effic. *Nicholson, J.W.*, *J-LT Aug 03* 1758-1762

dual-order Raman fiber amps., RIN transfer meas. and modeling. *Mermelstein, M.D.*, +, *J-LT Jun 03* 1518-1523

error probab., presence of in-band crosstalk noise, WDM nets., accurate estim. *Kamalakis, T.*, +, *J-LT Oct 03* 2172-2181

high-output-power polariz.-insensitive SOA, WDM syst. switching elements. *Morito, K.*, +, *J-LT Jan 03* 176-181

Impact of dispersion fluct. on 40-Gb/s dispersion-managed lightwave systs. *Poutrina, E.*, +, *J-LT Apr 03* 990-996

lumped and distrib. Raman amps., double Rayleigh scatt. noise. *Parolari, P.*, +, *J-LT Oct 03* 2224-2228

Monitoring opt. network perform. degrad. due to amp. noise. *Kilper, D.C.*, +, *J-LT May 2003* 1171-1178

noise suppression of Nd:YVO₄ solid-state lasers for telecommunication applications. *Csornyei, M.*, +, *J-LT Dec 03* 2983-2988

opt. amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919

opt. amps., index contrast scaling. *Saini, S.*, +, *J-LT Oct 03* 2368-2376

optical heterodyne detection technique for densely multiplexed mm-wave band radio-on-fiber systs. *Kuri, T.*, +, *J-LT Dec 03* 3167-3179

s-band Er-doped fiber amps., multistage config. sign, charactn., gain tilt compensation. *Ono, H.*, +, *J-LT Oct 03* 2240-2246

stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634

Laser radiation effects

germano-silica planar waveguides, 157-nm F₂ laser radiation photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148

Laser reliability

Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009

Laser resonators

10-W Raman fiber lasers, 1248 nm, phosphosilicate fibers. *Xiong, Z.*, +, *J-LT Oct 03* 2377-2381

amps., noise. *Yamamoto, Y.*, +, *J-LT Nov 03* 2895-2915

Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao*, +, *J-LT Jan 03* 160-169

Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009

graded SCH VCSELs, reson.-wavelength control/opt.-confine. anal. *Wei-Choon Ng*, +, *J-LT Feb 03* 555-560

high-speed directly modulated Fabry-Perot/DFB spot-size-converted lasers, uncooled telecomm. environ. *Klotzkin, D.*, +, *J-LT Jan 03* 69-78

opt. amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919

Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937

Lasers

correction to "Design of two-section DBR laser operating at ITU frequencies only by grating current tuning" (Jun 03 1524-1530). *Seeds, A.J.*, +, *J-LT Dec 03* 3477

microwave photonic direct-sequence transmitter and heterodyne correlation receiver. *Funk, E.E.*, +, *J-LT Dec 03* 2962-2967

Lasers; cf. Distributed Bragg reflector lasers; Distributed feedback lasers; Excimer lasers; Raman lasers; Ring lasers; Solid lasers; Waveguide lasers

Laser stability

Brillouin fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554

Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369

opt. injection, VCSEL polariz. control. *Bandyopadhyay, S.*, +, *J-LT Oct 03* 2395-2404

Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937

telecomm. lasers, wavel. stabilizer. *Colace, L.*, +, *J-LT Aug 03* 1749-1757

Laser tuning

Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937

ultra-high-capacity IP routers, opt. switch fabrics. *Gripp, J.*, +, *J-LT Nov 03* 2839-2850

widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634

Lattice dynamics; cf. Phonons

Lead compounds

feed-forward continuous and complete polariz. control, PLZT rotatable-variable waveplate and inline polarimeter. *Hirabayashi, K.*, +, *J-LT Sep 03* 1920-1932

thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R.*, +, *J-LT Aug 03* 1820-1827

Leaky wave antennas

cylindrical antiresonant reflecting optical waveguide using transfer matrix; design and anal. *Tee, C.W.*, +, *J-LT Dec 03* 3379-3386

Least squares methods

3D opt. waveguides, vector modes, modified imaginary dist. BPM. *Chamorro-Posada, P.*, *J-LT Mar 03* 862-867

Lenses

Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R.*, +, *J-LT Apr 03* 1046-1052

wedge-shaped lensed fibers for fiber-laser coupling, design optim. *Yongzhi He*, +, *J-LT Oct 03* 2271-2275

Life estimation

std. fibers, DUV laser radiation, photosensitization. *Chen, K.P.*, +, *J-LT Sep 03* 1958-1968

Light-emitting diodes

reson.-cavity LEDs, variable num.-aperture temporal-coherence meas. *Coutinho, R.C.*, +, *J-LT Jan 03* 149-154

Light interferometers; cf. Fabry-Perot interferometers

Light polarization; cf. Optical fiber polarization

Light scattering; cf. Raman spectra; Rayleigh scattering

Linear algebra; cf. Eigenvalues and eigenfunctions; Vectors

Linear programming

broad-band opt. networks, bandwidth-efficient shared-path protection. *Yizhi Xiong*, +, *J-LT Feb 03* 365-371

Liquid crystal devices

broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K.*, +, *J-LT Jan 03* 25-31

dyn. spectral equalizer, free-space dispers. optics combined, PDLC spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073

endless polariz. control algm., adjustable lin. retarders, fixed axes. *Martinelli, M.*, +, *J-LT Sep 03* 2089-2096

fiber arrays, liq.-cryst. polariz. stabilizers. *Hirabayashi, K.*, +, *J-LT Oct 03* 2162-2171

polariz.-depend. loss, accurate spectral charactn. *Craig, R.M.*, *J-LT Feb 03* 432-437

versatile holographic liq.-cryst. wavel.-selective opt. switch, design and perform. *Fracasso, B.*, +, *J-LT Oct 03* 2405-2411

Liquid crystals

dyn. spectral equalizer, free-space dispers. optics combined, PDLC spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073

phase-shifting VOA with polymer dispersed liquid crystal. *Chanclou, P.*, +, *J-LT Dec 03* 3471-3476

plastic packaging, low-cost opt. transceiver modules, effective EM shielding. *Tzong-Lin Wu*, +, *J-LT Jun 03* 1536-1543

Liquids; cf. Liquid crystals; Water

Lithium compounds

digital and analog appls., opt. intens. modulators. *Li, G.L.*, +, *J-LT Sep 03* 2010-2030

- high-speed electrooptic modulator charactn., opt. spectrum anal. *Yongqiang Shi*, +, *J-LT Oct 03* 2358-2367
- LiNbO₃ modulator based 10-Gb/s transmitters, SOA booster amps. *Yonggyoo Kim*, +, *J-LT Feb 03* 476-481
- LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245
- LiNbO₃ tunable spectral slicing waveguide filter design, DWDM appls. *Taylor, H.F.*, *J-LT Mar 03* 837-847
- Lithium materials/devices**
simultaneous label swapping and wavel. conversion of multiple independent WDM channels, all-opt. MPLS net., PPLN waveguides, wavel. converters. *Gurkan, D.*, +, *J-LT Nov 03* 2739-2745
- Lithography; cf.** Photolithography
- Local area networks**
WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485
- Local area networks; cf.** Optical fiber LAN
- Logic circuits**
ultrafast nonlin. interferometer (UNI)-based digital opt. ccts. and their, packet switching. *Bintjas, C.*, +, *J-LT Nov 03* 2629-2637
- Logic devices; cf.** Logic circuits
- Log normal distributions**
stimulated Raman crosstalk, dispers.-managed fiber links, stat. anal. *Yamamoto, T.*, +, *J-LT Oct 03* 2229-2239
- Losses; cf.** Optical losses
- Loss measurement**
As-Se IR-transmitting glass fiber opt. loss, heating effects. *Nguyen, V.Q.*, +, *J-LT Jan 03* 122-126
cylindrical antiresonant reflecting optical waveguide using transfer matrix; design and anal. *Tee, C.W.*, +, *J-LT Dec 03* 3379-3386
glass photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03* 246-253
low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S.*, +, *J-LT Jan 03* 211-217
- Low-pass filters**
Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. *Phua, P.B.*, +, *J-LT Apr 03* 982-989
- Low-temperature**
photonic A/D conversion using low-temperature-grown GaAs MSM switches integrated with Si-CMOS. *Urata, R.*, +, *J-LT Dec 03* 3104-3115
- Luminescence; cf.** Superradiance

M

- Machining; cf.** Micromachining
- Magnetic devices; cf.** Magneto-optical devices
- Magnetic fields**
magnetic near-field measurements over LSI package pins by fiber-edge magnetooptic probe. *Iwanami, M.*, +, *J-LT Dec 03* 3273-3281
- Magnetic resonance; cf.** Ferromagnetic resonance
- Magnetism; cf.** Magnetic fields
- Magneto-optical devices**
performance evaluation of fiber-edge MO probe. *Wakana, S.*, +, *J-LT Dec 03* 3292-3299
- Magneto-optical effects; cf.** Faraday effect
- Magnetooptic effects**
photonic cryst. fiber, birefr., magneto-opt. method/FEA. *Peyrilloux, A.*, +, *J-LT Feb 03* 536-539
- Maintenance**
fiber-to-the-desk appl., ethernet-based pass. opt. LAN. *Radovanovic, I.*, +, *J-LT Nov 03* 2534-2545
- Materials; cf.** Ceramics; Glass; Optical materials
- Materials testing**
moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. *Mrotek, J.L.*, +, *J-LT Aug 03* 1775-1778
- Mathematical analysis; cf.** Bessel functions; Eigenvalues and eigenfunctions; Integral equations; Inverse problems
- Mathematical programming; cf.** Linear programming
- Mathematics; cf.** Convergence; Probability; Statistics
- Matrices**
ARC design optim., space mapping tech. *Ning-Ning Feng*, +, *J-LT Jan 03* 281-285
- imaging errors of AWG, calc. *Klekamp, A.*, +, *J-LT Sep 03* 1978-1986
- Jones matrix anal. models applied, opt. syst., by high-order PMD, comp. *Orlandini, A.*, +, *J-LT Jun 03* 1456-1464
- long-period fiber gratings, arbitrary azimuthal/radial refr. index vars., transmittance modelling. *Anemogiannis, E.*, +, *J-LT Jan 03* 218-227
- paraxial approx. for stable and efficient reflective BPM, preconditioner. *Ning-Ning Feng*, +, *J-LT Sep 03* 1996-2001
- photonic devices by gen. space mapping tech., modeling and simul. *Ning-Ning Feng*, +, *J-LT Jun 03* 1562-1567
- polariz.-depend. loss, accurate spectral charactn. *Craig, R.M.*, *J-LT Feb 03* 432-437
- Matrix algebra; cf.** Matrix inversion
- Matrix inversion**
opt. fibers, polariz. mode dispersion emulation/inversion. *Kogelnik, H.*, +, *J-LT Feb 03* 482-495
- Maximum likelihood decoding**
opt.-fiber commun., ASE noise dominated, turbo code decoder perform. *Yi Cai*, +, *J-LT Mar 03* 727-734
- Measurement**
Er-doped superfluorescent fiber source with 0.5-ppm long-term mean wavelength stability. *Park, H.G.*, +, *J-LT Dec 03* 3427-3433
magnetic near-field measurements over LSI package pins by fiber-edge magnetooptic probe. *Iwanami, M.*, +, *J-LT Dec 03* 3273-3281
ratio between phase and group birefringence in optical single-mode fibers. *Legre, M.*, +, *J-LT Dec 03* 3374-3378
- Measurement; cf.** Loss measurement; Mechanical variables measurement; Noise measurement; Optical variables measurement; Polarimetry; Pollution measurement; Reflectometry; Velocity measurement
- Measurement errors**
arrayed waveguide grating based opt. devices, phase error meas. *Wei Chen*, +, *J-LT Jan 03* 198-205
distributed fiber Bragg grating sens., arrayed waveguide grating fast opt. wavelength interrogator. *Sano, Y.*, +, *J-LT Jan 03* 132-139
Monitoring technol. of salinity in water with opt. fiber sens. *Yong Zhao*, +, *J-LT May 2003* 1334-1338
single-mode opt. fiber arrays, high-precision charactn. *Bernussi, A.A.*, +, *J-LT Jun 03* 1557-1561
Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820
- Measurement standards**
polariz. changes, Classification and meas., State. *Leo, P.J.*, +, *J-LT Oct 03* 2189-2193
- Mechanical factors**
anal. of bent opt. waveguides, plane-wave boundary method. *Nesterov, A.*, +, *J-LT Oct 03* 2434-2437
Experimental and num. study of SiON microresonators with air and polymer cladding. *Klunder, D.J.W.*, +, *J-LT Apr 03* 1099-1110
Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019
Packaging, fiber Bragg grating with metal coating for athermal design. *Yu-Lung Lo*, +, *J-LT May 2003* 1377-1383
- Mechanical variables control; cf.** Strain control
- Mechanical variables measurement**
double-coated opt. fibers design, polymeric coating longterm tensile-force-induced delamination. *Ting-Ying Shen*, +, *J-LT Jan 03* 106-110
Novel fiber-optic sens. based on long-period fiber gratings written by HF CO₂ laser pulses. *Yun-Jiang Rao*, +, *J-LT May 2003* 1320-1327
- Mechanical variables measurement; cf.** Strain measurement
- Metal-semiconductor-metal structures**
photonic A/D conversion using low-temperature-grown GaAs MSM switches integrated with Si-CMOS. *Urata, R.*, +, *J-LT Dec 03* 3104-3115
- Metropolitan area networks**
broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K.*, +, *J-LT Jan 03* 25-31
cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197
customer-controlled and -managed opt. nets. *St Arnaud, B.*, +, *J-LT Nov 03* 2804-2810
data and voice integrat. over DWDM MAN. *Stavdas, A.*, +, *J-LT Feb 03* 372-383
efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzwow, M.*, +, *J-LT Jun 03* 1435-1455

- erratum to "A genetic algorithm-based methodology for optimizing multiservice convergence in a metro WDM network" (May 03 1114-1133). *Hyo-Sik Yang*, +, *J-LT Nov 03* 2953-2954
- Genetic algm.-based methodology for optimizing multiservice convergence in metro WDM network. *Hyo-Sik Yang*, +, *J-LT May 2003* 1114-1133
- HORNET archit., demons. and syst. anal. *White, I.M.*, +, *J-LT Nov 03* 2489-2498
- mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. *Lim, C.*, +, *J-LT Oct 03* 2203-2210
- multiweight unipolar codes for multimedia opt. CDMA appls., pairwise balanced designs, design. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1850-1856
- N×N multiwavelength opt. cross-connect based on tunable FBGs. *Nam Su Moon*, +, *J-LT Mar 03* 703-718
- WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485
- Microactuators**
EM micromirror array with single-cryst. Si mirror plate and Al spring. *Chang-Hyeon Ji*, +, *J-LT Mar 03* 584-590
- Microelectromechanical devices**
Array interconnection for rearrangeable 2D MEMS opt. switch. *Teck Yoong Chai*, +, *J-LT May 2003* 1134-1140
surface micromachined opt. scanner array, photoresist lenses fabricated by thermal reflow proc. *Toshiyoshi, H.*, +, *J-LT Jul 03* 1700-1708
switching devices, spatial and spectral resolu. combining photonic cryst. and MOEMS structs. *Letartre, X.*, +, *J-LT Jul 03* 1691-1699
- Micromachining**
3D microoptical bench by bulk micromachining, opt. scanner. *Sasaki, M.*, +, *J-LT Mar 03* 602-608
EM micromirror array with single-cryst. Si mirror plate and Al spring. *Chang-Hyeon Ji*, +, *J-LT Mar 03* 584-590
GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
integrated laser blood flowmeter by micromachining and surface mount techs. *Higurashi, E.*, +, *J-LT Mar 03* 591-595
two-axis beam-steering micromirrors for large opt. cross-connects. *Aksyuk, V.A.*, +, *J-LT Mar 03* 634-642
two-photon laser precision microfab., nanophotonic/opt. MEMS appls. *Hong-Bo Sun*, +, *J-LT Mar 03* 624-633
- Micromechanical devices**
optical MEMs and its future trends (special section). *J-LT Mar 03* 582-671
optical MEMs and its future trends (special section intro.). *Lin, L.Y.*, +, *J-LT Mar 03* 582-583
- Micromechanical devices; cf.** Microactuators; Micromechanical resonators; Microsensors
- Micromechanical resonators**
lightwave switching in semiconductor microring devices by free carrier injection. *Ibrahim, T.A.*, +, *J-LT Dec 03* 2997-3003
- Microresonators**
ellipt. whispering-gallery-mode microdisk waveguide filters, tuning. *Boriskina, S.V.*, +, *J-LT Sep 03* 1987-1995
Normalized approach for designing cylindrical microresonators. *Klunder, D.J.W.*, +, *J-LT May 2003* 1405-1410
racetrack microring resonator/multimode interf. coupler, static spectral charact. response. *Caruso, L.*, +, *J-LT Jan 03* 206-210
switching devices, spatial and spectral resolu. combining photonic cryst. and MOEMS structs. *Letartre, X.*, +, *J-LT Jul 03* 1691-1699
- Microscopy**
Amplitude and phase evol. of opt. fields inside periodic photonic struct. *Fluck, E.*, +, *J-LT May 2003* 1384-1393
VUV laser-induced refr.-index change and birefr., std. opt. fibers. *Chen, K.P.*, +, *J-LT Sep 03* 1969-1977
- Microsensors**
integrated laser blood flowmeter by micromachining and surface mount techs. *Higurashi, E.*, +, *J-LT Mar 03* 591-595
microoptical systs., modular fab. concept for commercial appl. *Mohr, J.A.*, +, *J-LT Mar 03* 643-647
- Microwave communication**
120-GHz wireless link, photonic techs. for gener., modulation, emission of mm-wave sigs. *Hirata, A.*, +, *J-LT Oct 03* 2145-2153
digital-microwave link, opt. generated elec.-modulation formats. *Candelas, P.*, +, *J-LT Feb 03* 496-499
dispers. resist., analog radio-on-fiber upconversion links, improv. *Le Guennec, Y.*, +, *J-LT Oct 03* 2211-2216
mm-wave data-modulated opt. sig. generation using opt. injection PLL. *Johansson, L.A.*, +, *J-LT Feb 03* 511-520
mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. *Lim, C.*, +, *J-LT Oct 03* 2203-2210
- Microwave devices**
microwave photonics (special section). *J-LT Dec 03* 2959-3299
microwave photonics (special section intro.). *Seeds, A.J.*, +, *J-LT Dec 03* 2959-2961
- Microwave devices; cf.** Microwave mixers; Microwave oscillators
- Microwave frequency conversion**
dispers. resist., analog radio-on-fiber upconversion links, improv. *Le Guennec, Y.*, +, *J-LT Oct 03* 2211-2216
- Microwave generation**
coherence of pulsed microwave signals carried by two-frequency solid state lasers. *Lai, N.D.*, +, *J-LT Dec 03* 3037-3042
- Microwave mixers**
dispers. resist., analog radio-on-fiber upconversion links, improv. *Le Guennec, Y.*, +, *J-LT Oct 03* 2211-2216
high-efficiency optical-microwave mixing approach. *Jaro, G.*, +, *J-LT Dec 03* 3078-3084
- Microwave oscillators**
stabilizing optoelectronic microwave oscillator with photonic filters. *Stekalov, D.*, +, *J-LT Dec 03* 3052-3061
- Microwave photonics**
application of ultrafast photonic technique to study polarization switching dynamics of thin-film ferroelectric capacitors. *Li, J.*, +, *J-LT Dec 03* 3282-3291
BW cancellation in distributed traveling-wave photodetectors. *Murthy, S.*, +, *J-LT Dec 03* 3071-3077
direct optical switching CDMA syst. for FO radio highway networks. *Tsukamoto, K.*, +, *J-LT Dec 03* 3209-3220
harmonic suppressed photonic microwave filter. *Vidal, B.*, +, *J-LT Dec 03* 3150-3154
microwave photonic direct-sequence transmitter and heterodyne correlation receiver. *Funk, E.E.*, +, *J-LT Dec 03* 2962-2967
microwave photonic photorefractive smart filters. *Vourc'h, E.*, +, *J-LT Dec 03* 3135-3143
microwave photonics (special section). *J-LT Dec 03* 2959-3299
microwave photonics (special section intro.). *Seeds, A.J.*, +, *J-LT Dec 03* 2959-2961
microwave V-I transmission matrix formalism for anal. of photonic ccts.: application to fiber Bragg gratings. *Capmany, J.*, +, *J-LT Dec 03* 3125-3134
photonic assisted generation of arbitrary mm-wave and microwave EM waveforms via direct space-to-time optical pulse shaping. *McKinney, J.D.*, +, *J-LT Dec 03* 3020-3028
photonic time-stretched ADC: fundamental concepts and practical considerations. *Han, Y.*, +, *J-LT Dec 03* 3085-3103
sampled-grating DBR laser-based analog optical transmitters. *Johansson, L.A.*, +, *J-LT Dec 03* 2968-2976
- Microwave suppression**
high-resolution photonics-based interference suppression filter with wide passband. *Chan, E.H.W.*, +, *J-LT Dec 03* 3144-3149
- Microwave technology; cf.** Microwave generation; Microwave photonics
- Millimeter wave devices**
optical heterodyne detection technique for densely multiplexed mm-wave band radio-on-fiber systs. *Kuri, T.*, +, *J-LT Dec 03* 3167-3179
opto-electronic millimeter-wave synth. using optical frequency comb generator, optically injection locked lasers, and uni-traveling-carrier photodiode. *Fukushima, S.*, +, *J-LT Dec 03* 3043-3051
simultaneous 3-band modulation and FO transmission of 2.5-Gb/s baseband, microwave-, and 60-GHz-band signals on single wavelength. *Ikeda, K.*, +, *J-LT Dec 03* 3194-3202
- Millimeter wave devices; cf.** Millimeter wave filters
- Millimeter wave filters**
mm-wave WDM-fiber wireless network, wavelength-interleaved OADMs. *Marra, C.*, +, *J-LT Jan 03* 32-39
- Millimeter wave generation**
120-GHz wireless link, photonic techs. for gener., modulation, emission of mm-wave sigs. *Hirata, A.*, +, *J-LT Oct 03* 2145-2153
data-modulated opt. sig. generation using opt. injection PLL. *Johansson, L.A.*, +, *J-LT Feb 03* 511-520
- Minimax methods**
opt. trans. systs., constraint-based design. *Alicherry, M.*, +, *J-LT Nov 03* 2499-2510

Minimization methods

WDM networks, wavelength converter placement, optim. model. *Suixiang Gao*, +, *J-LT Mar 03* 684-694

Mirrors

1 × 2 all-opt. packet switch, all-opt. sig. proc. methods. *Dorren, H.J.S.*, +, *J-LT Jan 03* 2-12

Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031

integr. opt. mirrors, planar waveguide technol., anal. and design. *Wiechmann, S.*, +, *J-LT Jun 03* 1584-1591

Polymer-based 1 × 6 thermo-optic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang*, +, *J-LT Apr 03* 1053-1058

Mirrors; cf. Distributed Bragg reflectors**Mixed analog-digital integrated circuits**

design of large receiver and transmitter arrays for OE-VLSI applications.

Venditti, M.B., +, *J-LT Dec 03* 3406-3416

syst.-level modeling and simulation of 10G optoelectronic interconnect.

Kahrs, M., +, *J-LT Dec 03* 3244-3256

Mixers

High-isolation photonic microwave mixer/link for wideband sig. proc. and transm. *Yongqiang Shi*, +, *J-LT May 2003* 1224-1232

Nonlinearity anal. and optim. of HBTs for opt. mixer designs. *Langlois, P.J.*, +, *J-LT May 2003* 1350-1357

Mixers (circuits); cf. Microwave mixers**Mixing**

high-efficiency optical-microwave mixing approach. *Jaro, G.*, +, *J-LT Dec 03* 3078-3084

Mobile communication

BER improvement effect of optical delay insertion in ROF ubiquitous antenna architecture for wireless CDMA syst. *Ohtsuki, H.*, +, *J-LT Dec 03* 3203-3208

capacity anal. for WDM fiber-radio backbones with star-tree and ring architecture incorporating wavelength interleaving. *Lim, C.*, +, *J-LT Dec 03* 3308-3315

Modeling

measurement of gain in pump diode lasers using low-coherence source and synchronous detection. *Troger, J.*, *J-LT Dec 03* 3441-3445

multisectional modeling of high-speed EO modulators integrated in microwave cct. CAD environment. *Pirola, M.*, +, *J-LT Dec 03* 2989-2996

syst.-level modeling and simulation of 10G optoelectronic interconnect. *Kahrs, M.*, +, *J-LT Dec 03* 3244-3256

Mode locked lasers

Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369

Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937

Modulation

anal. of penalty due to LF intensity modulation in optical transmission systrs. *Baik, J.-S.*, +, *J-LT Dec 03* 3300-3307

cct. model for multiple transverse mode vertical-cavity surface emitting lasers. *Marozsak, T.*, *J-LT Dec 03* 2977-2982

optical subcarrier label swapping by semiconductor optical amplifiers. *Udvary, E.*, +, *J-LT Dec 03* 3221-3225

simultaneous 3-band modulation and FO transmission of 2.5-Gb/s baseband, microwave-, and 60-GHz-band signals on single wavelength. *Ikeda, K.*, +, *J-LT Dec 03* 3194-3202

Modulation; cf. Amplitude modulation; Chirp modulation; Intensity modulation; Modulation coding; Optical modulation**Modulation coding**

wavel./time (W/T) matrix codes for opt. CDMA, design and perform. anal. *Mendez, A.J.*, +, *J-LT Nov 03* 2524-2533

Modulators

anal. and characterization of traveling-wave electrode in electroabsorption modulator for radio-on-fiber application. *Lim, J.*, +, *J-LT Dec 03* 3004-3010

analog characterization of low-voltage MQW traveling-wave electroabsorption modulators. *Liu, B.*, +, *J-LT Dec 03* 3011-3019

Moisture

Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019

Monitoring

Monitoring opt. network perform. degrad. due to amp. noise. *Kilper, D.C.*, +, *J-LT May 2003* 1171-1178

Monitoring technol. of salinity in water with opt. fiber sens. *Yong Zhao*, +, *J-LT May 2003* 1334-1338

Monolithic integrated circuits; cf. Application specific integrated circuits; Bipolar integrated circuits**Monte Carlo methods**

Modeling and simul. of next-generation multimode fiber links. *Pepeljugoski, P.*, +, *J-LT May 2003* 1242-1255

MOS integrated circuits; cf. CMOS integrated circuits**MSM devices**

substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytsis, E.N.*, +, *J-LT Oct 03* 2382-2394

Multiaaccess communication

opt. satellite nets. *Chan, V.W.S.*, *J-LT Nov 03* 2811-2827

Multi-access systems; cf. Code division multiple access**Multimedia communication**

multiweight unipolar codes for multimedia opt. CDMA appls., pairwise balanced designs, design. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1850-1856

networks, opt. CDMA with time hopping/power control. *Yashima, H.*, +, *J-LT Mar 03* 695-702

streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03* 2123-2144

Multimedia systems; cf. Multimedia communication**Multiplexing**

Enhancement of MUX capability of low-coherence interferometric fiber sens. array by use of loop topol. *Libo Yuan*, +, *J-LT May 2003* 1313-1319

Multiplexing; cf. Subcarrier multiplexing; Time division multiplexing; Wavelength division multiplexing**Multiprotocol label switching**

RF photonics signal processing in subcarrier multiplexed optical-label switching communication systrs. *Zhu, Z.*, +, *J-LT Dec 03* 3155-3166

Multivibrators; cf. Flip-flops**N****Nanotechnology**

two-photon laser precision microfab., nanophotonic/opt. MEMS appls. *Hong-Bo Sun*, +, *J-LT Mar 03* 624-633

Neodymium

noise suppression of Nd:YVO₄ solid-state lasers for telecommunication applications. *Csornyei, M.*, +, *J-LT Dec 03* 2983-2988

Network interfaces

automatically switched opt. nets., PNNI-based control plane. *Sanchez-Lopez, S.*, +, *J-LT Nov 03* 2673-2682

IP/MPLS, ASON/GMPLS test bed of IST project LION. *Cavazzoni, C.*, +, *J-LT Nov 03* 2791-2803

Networks (circuits)

optical networks (special issue). *J-LT Nov 03* 2452-2952

optical networks (special issue intro.). *Jinno, M.*, +, *J-LT Nov 03* 2452-2454

Networks (circuits); cf. Analog circuits; Equalizers; Equivalent circuits; Filters; Modulators; Oscillators; Phase shifters; Printed circuits; Telecommunication networks**Network topology**

capacity anal. for WDM fiber-radio backbones with star-tree and ring architecture incorporating wavelength interleaving. *Lim, C.*, +, *J-LT Dec 03* 3308-3315

Neural nets; cf. Optical neural nets**Noise**

crosstalk, noise, and stability anal. of DWDM channels generated by injection locking techniques. *Cai, B.*, +, *J-LT Dec 03* 3029-3036

Noise; cf. Optical noise; Phase noise**Noise measurement**

noise suppression of Nd:YVO₄ solid-state lasers for telecommunication applications. *Csornyei, M.*, +, *J-LT Dec 03* 2983-2988

Nonlinear distortion

adaptive CMOS predistortion linearizer for FO links. *Sadhwani, R.*, +, *J-LT Dec 03* 3180-3193

Nonlinear distortion; cf. Intermodulation distortion

Nonlinear optics

double-clad fiber amps. for high-power pulse amplif., dyn. characts. *Yong Wang*, +, *J-LT Oct 03* 2262-2270
 high-channel-count chromatic dispers. compensation, phased-only sampled fiber Bragg gratings. *Hongpu Li*, +, *J-LT Sep 03* 2074-2083
 materials, nonlin. photosensitive response, grating writing model. *Besley, J.A.*, +, *J-LT Oct 03* 2421-2428
 photochromic liq.-core fibers, nonlin. input-output characts. *Saito, M.*, +, *J-LT Oct 03* 2255-2261

Nonlinear optics; cf. Optical frequency conversion; Optical hole burning; Optical phase conjugation; Optical saturation; Optical solitons

Nonlinear filters

birefr. two-mode opt. fibers, acoustooptic interact., acoustic birefr. effect. *Langli, B.*, +, *J-LT Feb 03* 528-535

Numerical analysis; cf. Convergence of numerical methods; Error analysis; Finite difference methods; Finite element analysis; Iterative methods; Monte Carlo methods

O**Ohmic contacts**

Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031

Open systems

all-opt. packet switching routers, opt. label swapping and 2R regeneration for scalable opt. label switching net. appls., demons. *Min Yong Jeon*, +, *J-LT Nov 03* 2723-2733

Optical beam focusing

surface micromachined opt. scanner array, photoresist lenses fabricated by thermal reflow proc. *Toshiyoshi, H.*, +, *J-LT Jul 03* 1700-1708
 Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R.*, +, *J-LT Apr 03* 1046-1052

Optical bistability

Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao*, +, *J-LT Jan 03* 160-169

Optical communication

anal. of penalty due to LF intensity modulation in optical transmission systs. *Baik, J.-S.*, +, *J-LT Dec 03* 3300-3307
 compact optical polarizer incorporating layered waveguide core structure. *Rajarajan, M.*, +, *J-LT Dec 03* 3463-3470
 noise suppression of Nd:YVO₄ solid-state lasers for telecommunication applications. *Csornyei, M.*, +, *J-LT Dec 03* 2983-2988
 optical networks (special issue). *J-LT Nov 03* 2452-2952
 optical networks (special issue intro.). *Jinno, M.*, +, *J-LT Nov 03* 2452-2454
 RF photonics signal processing in subcarrier multiplexed optical-label switching communication systs. *Zhu, Z.*, +, *J-LT Dec 03* 3155-3166
 sampled-grating DBR laser-based analog optical transmitters. *Johansson, L.A.*, +, *J-LT Dec 03* 2968-2976

Optical communication; cf. Optical communication equipment; Optical fiber communication

Optical communication equipment

2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690
 2-sect. DBR laser operating, ITU freqs. only by grating current tuning, design. *Feies, V.L.*, +, *J-LT Jun 03* 1524-1530
 2-stage Sagnac DEMUX. *Parolari, P.*, +, *J-LT Aug 03* 1808-1812
 adaptive min. MSE controlled PLC opt. equalizer for chromatic dispers. compensation. *Secondini, M.*, +, *J-LT Oct 03* 2322-2331
 amps., index contrast scaling. *Saini, S.*, +, *J-LT Oct 03* 2368-2376
 Array interconnection for rearrangeable 2D MEMS opt. switch. *Teck Yoong Chai*, +, *J-LT May 2003* 1134-1140
 Channel drop filter using, single defect in 2-D photonic cryst. slab-defect engng. with respect to polariz. mode and ratio of emissions from upper and lower sides. *Asano, T.*, +, *J-LT May 2003* 1370-1376
 control syst. for opt. delay-line cct. used reconfigurable gain equalizer, design and anal. *Schlipf, T.R.*, +, *J-LT Sep 03* 1944-1952
 Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A.*, +, *J-LT Apr 03* 1071-1082
 designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi*, +, *J-LT Oct 03* 2314-2321
 digital and analog appls., opt. intens. modulators. *Li, G.L.*, +, *J-LT Sep 03* 2010-2030

Distributed fiber Raman amps. with localized loss. *Seung Kwan Kim*, +, *J-LT May 2003* 1286-1293

dyn. spectral equalizer, free-space dispers. optics combined, PDLC spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073

electrically tunable dispers. compensator, fixed center wavel., fiber Bragg grating. *Ngo, N.Q.*, +, *J-LT Jun 03* 1568-1575

ellipt. whispering-gallery-mode microdisk waveguide filters, tuning. *Boriskina, S.V.*, +, *J-LT Sep 03* 1987-1995

Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao*, +, *J-LT Jan 03* 160-169

feed-forward continuous and complete polariz. control, PLZT rotatable-variable waveplate and inline polarimeter. *Hirabayashi, K.*, +, *J-LT Sep 03* 1920-1932

Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009

Four-wave mixing between pump and sig. in distributed Raman amp. *Tsu-Te Kung*, +, *J-LT May 2003* 1164-1170

GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S.*, +, *J-LT Jan 03* 170-175

grating-assisted codirectional fiber coupler design. *Brenne, J.K.*, +, *J-LT Jan 03* 254-263

high-output-power polariz.-insensitive SOA, WDM syst. switching elements. *Morito, K.*, +, *J-LT Jan 03* 176-181

high-speed electrooptic modulator charactn., opt. spectrum anal. *Yongqiang Shi*, +, *J-LT Oct 03* 2358-2367

Influence of Bragg gratings phase mismatch in Mach-Zehnder-based ADM. *Mechin, D.*, +, *J-LT May 2003* 1411-1416

InGaAsP-InP 1.55- μ m lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M.*, +, *J-LT Jan 03* 269-274

Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369

LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245

logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583

low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S.*, +, *J-LT Jan 03* 211-217

N $\times$ several tens of Gb/s WDM transm., integr.-optic dispers. slope equalizer. *Takiguchi, K.*, +, *J-LT Nov 03* 2463-2469

optical networks (special issue). *J-LT Nov 03* 2452-2952

optical networks (special issue intro.). *Jinno, M.*, +, *J-LT Nov 03* 2452-2454

optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H.*, +, *J-LT Jun 03* 1544-1548

Packaging, fiber Bragg grating with metal coating for athermal design. *Yu-Lung Lo*, +, *J-LT May 2003* 1377-1383

packet's time-to-live (TTL) field and subsequent dropping of zero-TTL packet, all-opt. decrementing. *McGehean, J.E.*, +, *J-LT Nov 03* 2746-2752

props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A.*, +, *J-LT Aug 03* 1813-1819

pulses-fiber gratings interact. by of joint time-freq. sig. representations. *Azana, J.*, +, *J-LT Nov 03* 2931-2941

Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235

SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836

SOI submicrometer-size waveguide devices, electrooptic modulation. *Barrios, C.A.*, +, *J-LT Oct 03* 2332-2339

Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349

stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202

subband all-pass filter archits., appls., dispers. and dispers.-slope compensation and continuously variable delay lines. *Madsen, C.K.*, *J-LT Oct 03* 2412-2420

telecomm. lasers, wavel. stabilizer. *Colace, L.*, +, *J-LT Aug 03* 1749-1757
 transient dynamics of EDFA pumped by 1480- and 980-nm lasers, anal. and control. *Tian, C.*, +, *J-LT Aug 03* 1728-1734

Optical communication equipment; cf. Optical receivers; Optical repeaters; Optical transmitters; Photonic switching systems

Optical computing; cf. Optical neural nets

Optical control; cf. Optical variables control**Optical correlators**

- asynchronous opt. CDMA systs., opt. orthogonal codes, large crosscorrelation. *Chi-Shun Weng*, +, *J-LT Mar 03* 735-742
- cct., burst, packet switchings, versatile opt. code-based MPLS. *Kitayama, K.-I.*, +, *J-LT Nov 03* 2753-2764
- optically assisted Internet routing, arrays of dynamically reconfigurable FBG-based correlators. *Hauer, M.C.*, +, *J-LT Nov 03* 2765-2778

Optical couplers

- 2×2 3-dB multimode interf. couplers via access waveguide width, optimizing imbalance and loss. *Hill, M.T.*, +, *J-LT Oct 03* 2305-2313
- compact optical polarizer incorporating layered waveguide core structure. *Rajarajan, M.*, +, *J-LT Dec 03* 3463-3470
- Cross-orthogonality between guided and radiation modes at opt. waveguide discontinuities. *Ramadan, T.A.*, *J-LT May 2003* 1394-1404
- Experimental and num. study of SION microresonators with air and polymer cladding. *Klunder, D.J.W.*, +, *J-LT Apr 03* 1099-1110
- extended optical fiber line testing system using eight-channel L/U-band crossed optical waveguide coupler for L-band WDM transmission. *Araki, N.*, +, *J-LT Dec 03* 3316-3322
- full-cycle-coupler-based opt. ADM and perform. characts., 40-Gb/s WDM nets. *Riziotis, C.*, +, *J-LT Aug 03* 1828-1837
- imaging errors of AWG, calc. *Klekamp, A.*, +, *J-LT Sep 03* 1978-1986
- InGaAsP-InP 1.55- μ m lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M.*, +, *J-LT Jan 03* 269-274
- low-loss coupling, polariz.-insensitive microwaveguides and single-mode opt. fibers, 2D taper. *Vivien, L.*, +, *J-LT Oct 03* 2429-2433
- low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S.*, +, *J-LT Jan 03* 211-217
- racetrack microring resonator/multimode interf. coupler, static spectral charact. response. *Caruso, L.*, +, *J-LT Jan 03* 206-210
- rigorous beam propagation anal. of tapered spot-size converters in deep-etched semiconductor waveguides. *Rahman, B.M.A.*, +, *J-LT Dec 03* 3392-3398
- substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytsis, E.N.*, +, *J-LT Oct 03* 2382-2394
- switching devices, spatial and spectral resolu. combining photonic cryst. and MOEMS structs. *Letartre, X.*, +, *J-LT Jul 03* 1691-1699

Optical couplers; cf. Optical fiber couplers**Optical crosstalk**

- 2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690
- all-opt. wavel.-division multiplexed packet nets., collision avoidance. *Elaine Wong*, +, *J-LT Nov 03* 2652-2660
- amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919
- Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang*, +, *J-LT Apr 03* 953-960
- data and voice integrat. over DWDM MAN. *Stavdas, A.*, +, *J-LT Feb 03* 372-383
- error probab., presence of in-band crosstalk noise, WDM nets., accurate estim. *Kamalakis, T.*, +, *J-LT Oct 03* 2172-2181
- Estimation of perform. degrad. of bidirectional WDM transm. systs. due to Rayleigh backscatt. and ASE noises using num. and anal. models. *Jeongyun Ko*, +, *J-LT Apr 03* 938-946
- Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009
- Four-wave mixing between pump and sig. in distributed Raman amp. *Tsu-Te Kung*, +, *J-LT May 2003* 1164-1170
- logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583
- lumped and distrib. Raman amps., double Rayleigh scatt. noise. *Parolari, P.*, +, *J-LT Oct 03* 2224-2228
- N $\times$ N multiwavelength opt. cross-connect based on tunable FBGs. *Nam Su Moon*, +, *J-LT Mar 03* 703-718
- optoelectromechanical switch array, pass. aligned free-space opt. components. *Ruzzu, A.C.M.*, +, *J-LT Mar 03* 664-671
- Polymer-based 1×6 thermooptic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang*, +, *J-LT Apr 03* 1053-1058
- sig. distortion and crosstalk penalties induced by opt. filters, opt. nets. *Downie, J.D.*, +, *J-LT Sep 03* 1876-1886
- slanted sidewall high index contrast planar silica waveguides, polariz. crosstalk. *Somasiri, N.*, +, *J-LT Jan 03* 54-60

- spectrum-sliced incoherent light for wide-area access net., super-DWDM transm. *Akimoto, K.*, +, *J-LT Nov 03* 2715-2722
- stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202
- stimulated Raman crosstalk, dispers.-managed fiber links, stat. anal. *Yamamoto, T.*, +, *J-LT Oct 03* 2229-2239
- transparent ultra-long-haul DWDM nets., broadcast-and-select OADM/OXC archit. *Vasilyev, M.*, +, *J-LT Nov 03* 2661-2672
- wavelength multiplexed fiber Bragg gratings, network sens. appls. *Abad, S.*, +, *J-LT Jan 03* 127-131
- WDM analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03* 500-505
- WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485

Optical data processing

- dual Mach-Zehnder modulator opt. transmitters, high-speed data, pulse-carver alignment. *Sinsky, J.H.*, *J-LT Feb 03* 412-423
- extrinsic Fabry-Perot interferometric opt. fiber sens., strain meas. *Sang-Hoon Kim*, +, *J-LT Mar 03* 797-804
- wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03* 1612-1620

Optical delay lines

- Cell-sorting device for creating sync. variable-length opt. packet switches. *Lin, P.J.*, +, *J-LT Apr 03* 893-903
- control syst. for opt. delay-line cct. used reconfigurable gain equalizer, design and anal. *Schlipf, T.R.*, +, *J-LT Sep 03* 1944-1952
- multiwavelength opt. packet-switched network, contention-resolu. schemes. *Shun Yao*, +, *J-LT Mar 03* 672-683
- NRZ Gb/s opt. transm., higher order polariz.-mode dispersion compensation. *Lorenzetto, G.*, +, *J-LT Feb 03* 424-431
- subband all-pass filter archits., appls., dispers. and dispers.-slope compensation and continuously variable delay lines. *Madsen, C.K.*, *J-LT Oct 03* 2412-2420

Optical device fabrication

- 3D microoptical bench by bulk micromachining, opt. scanner. *Sasaki, M.*, +, *J-LT Mar 03* 602-608
- direct UV writing, variable opt. attenuator fabricated. *Svalgaard, M.*, +, *J-LT Sep 03* 2097-2103
- EM micromirror array with single-cryst. Si mirror plate and Al spring. *Chang-Hyeon Ji*, +, *J-LT Mar 03* 584-590
- GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
- high-speed directly modulated Fabry-Perot/DFB spot-size-converted lasers, uncooled telecomm. environ. *Klotzkin, D.*, +, *J-LT Jan 03* 69-78
- hybrid glasses for microoptics, photolithographic proc. *Karkkainen, A.H.O.*, +, *J-LT Mar 03* 614-623
- microoptical systs., modular fab. concept for commercial appl. *Mohr, J.A.*, +, *J-LT Mar 03* 643-647
- Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235
- SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836
- Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349
- sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060
- surface micromachined opt. scanner array, photoresist lenses fabricated by thermal reflow proc. *Toshiyoshi, H.*, +, *J-LT Jul 03* 1700-1708
- Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R.*, +, *J-LT Apr 03* 1046-1052
- Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

Optical diffraction

- wedge-shaped lensed fibers for fiber-laser coupling, design optim. *Yongzhi He*, +, *J-LT Oct 03* 2271-2275

Optical dispersion

- optical heterodyne detection technique for densely multiplexed mm-wave band radio-on-fiber systs. *Kuri, T.*, +, *J-LT Dec 03* 3167-3179

Optical dispersion; cf. Optical fiber dispersion

- Optical elements; cf.** Optical couplers; Optical delay lines; Optical fibers; Optical films; Optical filters; Optical isolators; Optical phase locked loops; Optical waveguides

Optical fabrication

optical MEMs and its future trends (special section). *J-LT Mar 03* 582-671
 optical MEMs and its future trends (special section intro.). *Lin, L.Y., +, J-LT Mar 03* 582-583

Optical fabrication; cf. Optical fiber fabrication**Optical feedback**

fiber arrays, liq.-cryst. polariz. stabilizers. *Hirabayashi, K., +, J-LT Oct 03* 2162-2171
 NRZ Gb/s opt. transm., higher order polariz.-mode dispersion compensation. *Lorenzetto, G., +, J-LT Feb 03* 424-431
 transient dynamics of EDFA pumped by 1480- and 980-nm lasers, anal. and control. *Tian, C., +, J-LT Aug 03* 1728-1734

Optical fiber amplifiers

influence of high optical power light launched into optical fibers in MT connector. *Hogari, K., +, J-LT Dec 03* 3344-3348

Optical fiber cables

aerial distrib. cable/feeder sects., fiber access networks. *Kawataka, J., +, J-LT Mar 03* 789-796
 DPSK and OOK WDM transm., transoceanic dists. and their perform. degradations, nonlin. phase noise, comparative study. *Mizuochi, T., +, J-LT Sep 03* 1933-1943
 single-mode opt.-fiber cable networks for WDM systs., transm. characts. *Hogari, K., +, J-LT Feb 03* 540-545

Optical fiber cladding

birefr. two-mode opt. fibers, acoustooptic interact., acoustic birefr. effect. *Langli, B., +, J-LT Feb 03* 528-535
 Brillouin freq. shift and long. acoustic wave, silica opt. fiber, triple-layered struct. *Jaewang Yu, +, J-LT Aug 03* 1779-1786
 cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. *Jeong, H., +, J-LT Aug 03* 1838-1845
 double-clad fiber amps. for high-power pulse amplif., dyn. characts. *Yong Wang, +, J-LT Oct 03* 2262-2270
 double-coated opt. fibers design, polymeric coating longterm tensile-force-induced delamination. *Ting-Ying Shen, +, J-LT Jan 03* 106-110
 gain-flattening filter design, rotationally symmetric crossed gratings. *Lobo, A.E., +, J-LT Sep 03* 2084-2088
 long-period gratings, fiber cladding mode sensitivity charactn. *Besley, J.A., +, J-LT Mar 03* 848-853
 matched-clad opt. fibers, variational anal. *Chiadini, F., +, J-LT Jan 03* 96-105
 moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. *Mrotek, J.L., +, J-LT Aug 03* 1775-1778
 Packaging, fiber Bragg grating with metal coating for athermal design. *Yu-Lung Lo, +, J-LT May 2003* 1377-1383
 Propagation charact. of single-polariz. opt. fiber with, ellipt. core and triple-clad. *Furukawa, S., +, J-LT May 2003* 1307-1312

Optical fiber communication

1 × 2 all-opt. packet switch, all-opt. sig. proc. methods. *Dorren, H.J.S., +, J-LT Jan 03* 2-12
 2D opt.-data links, on-chip parallel FEC appl. *Faucher, J., +, J-LT Feb 03* 466-475
 3rd.-order dispers. and sideband instabil., single-channel opt. fiber transm. by midway opt. phase conj. employing higher order dispers. mgt. *Kaewplung, P., +, J-LT Jun 03* 1465-1473
 8 × 10-Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur, +, J-LT Jun 03* 1499-1503
 all-opt. mesh nets., path-based flooding, restoration. *Sun-il Kim, +, J-LT Nov 03* 2605-2616
 Analog laser predistortion for multiservice radio-over-fiber systs. *Roselli, L., +, J-LT May 2003* 1211-1223
 analytical treatment of randomly birefringent periodically spun fibers. *Pizzinat, A., +, J-LT Dec 03* 3355-3363
 arbitrary opt. filtered opt. preamplified systs., Q-factor estim. *Rebola, J.L., +, J-LT Jan 03* 87-95
 Array interconnection for rearrangeable 2D MEMS opt. switch. *Teck Yoong Chai, +, J-LT May 2003* 1134-1140
 ASE noise dominated, turbo code decoder perform. *Yi Cai, +, J-LT Mar 03* 727-734
 asynchronous amplit. histogram eval. of NRZ sig., chromatic dispers. depend. *Shake, I., +, J-LT Oct 03* 2154-2161
 asynchronous opt. CDMA systs., opt. orthogonal codes, large crosscorrelation. *Chi-Shun Weng, +, J-LT Mar 03* 735-742

automatically switched opt. nets., PNNI-based control plane. *Sanchez-Lopez, S., +, J-LT Nov 03* 2673-2682
 bidirectional path switched ring networks for photonic IP networks. *Hayashi, M., +, J-LT Feb 03* 356-364
 blocking perform. anal. of WDM all-opt. nets., effective method. *Jintao Xiong, +, J-LT Jun 03* 1421-1434
 Brillouin freq. shift and long. acoustic wave, silica opt. fiber, triple-layered struct. *Jaewang Yu, +, J-LT Aug 03* 1779-1786
 broad-band opt. networks, bandwidth-efficient shared-path protection. *Yizhi Xiong, +, J-LT Feb 03* 365-371
 broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K., +, J-LT Jan 03* 25-31
 buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. *Allen, C.T., +, J-LT Jan 03* 79-86
 capacity anal. for WDM fiber-radio backbones with star-tree and ring architecture incorporating wavelength interleaving. *Lim, C., +, J-LT Dec 03* 3308-3315
 CDMA random access protocols with/without pretransmission coord. *Shalaby, H.M.H., J-LT Nov 03* 2455-2462
 Cell-sorting device for creating sync. variable-length opt. packet switches. *Lin, P.J., +, J-LT Apr 03* 893-903
 chaos communication syst. based on Er-doped fiber ring laser; effect of transmission fiber. *Zhang, F., +, J-LT Dec 03* 3334-3343
 cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. *Jeong, H., +, J-LT Aug 03* 1838-1845
 coded PSK for fiber-optic commun., spectral effic. *Kramer, G., +, J-LT Oct 03* 2438-2445
 composite-packet-switched WDM net., expt. demons. *Boroditsky, M., +, J-LT Aug 03* 1717-1722
 Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang, +, J-LT Apr 03* 953-960
 correction to "Evaluating the error probability in lightwave systems with chromatic dispersion, arbitrary pulse shape" (Nov 00 1493-1503). *Powell, O., J-LT Mar 03* 868
 cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M., +, J-LT Jan 03* 182-197
 customer-controlled and -managed opt. nets. *St Arnaud, B., +, J-LT Nov 03* 2804-2810
 customized ultrahigh repetition rate pulse seqs., superimposed fiber Bragg gratings, gener. *Azana, J., +, J-LT Jun 03* 1490-1498
 data and voice integrat. over DWDM MAN. *Stavdas, A., +, J-LT Feb 03* 372-383
 dense WDM mm-wave-band radio-on-fiber sig. transm., photonic downconversion. *Kuri, T., +, J-LT Jun 03* 1510-1517
 Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A., +, J-LT Apr 03* 1071-1082
 Development of syst. spec. for laser-optimized 50- μ m multimode fiber for multigigabit SW LANs. *Pepeljugoski, P., +, J-LT May 2003* 1256-1275
 direct-detect. opt. CDMA receiver, interf. estim. and double opt. hardlimiters. *Wakafuji, K., +, J-LT Oct 03* 2182-2188
 direct-detect. transm. syst. perform., laser noise influence. *Morgado, J.A.P., +, J-LT Mar 03* 759-768
 Dispersion-managed high-capacity ultra-long-haul transm. *Suzuki, M., +, J-LT Apr 03* 916-929
 dispersion-managed soliton syst. perform., span length random vars. *Chongjin Xie, +, J-LT Mar 03* 769-775
 dispers. resist., analog radio-on-fiber upconversion links, improv. *Le Guennec, Y., +, J-LT Oct 03* 2211-2216
 distortion in angle-modulated links induced by ripple in fiber-Bragg grating reflectance and delay characteristics. *Ulmer, T.G., J-LT Dec 03* 3226-3236
 dual Mach-Zehnder modulator opt. transmitters, high-speed data, pulse-carver alignment. *Sinsky, J.H., J-LT Feb 03* 412-423
 dual-order Raman fiber amps., RIN transfer meas. and modeling. *Mermelstein, M.D., +, J-LT Jun 03* 1518-1523
 Efficiency improvement of opt. fiber wavelength converter without spectral spread using sync. phase/FM. *Torii, K., +, J-LT Apr 03* 1039-1045
 efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzw, M., +, J-LT Jun 03* 1435-1455
 embedded transm. scheme, PPM signaling, symmetric error-correcting codes for opt. CDMA. *Kamakura, K., +, J-LT Jul 03* 1601-1611
 error probab., presence of in-band crosstalk noise, WDM nets., accurate estim. *Kamalakis, T., +, J-LT Oct 03* 2172-2181

- Estimation of perform. degrad. of bidirectional WDM transm. systs. due to Rayleigh backscatt. and ASE noises using num. and anal. models. Jeongyun Ko, +, *J-LT Apr 03* 938-946
- fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. Jeehoon Han, +, *J-LT Jun 03* 1504-1509
- freq.-interleaved DWDM mm-wave radio-on-fiber systs., DEMUX, arrayed-waveguide grating. Toda, H., +, *J-LT Aug 03* 1735-1741
- full-cycle-coupler-based opt. ADM and perform. characts., 40-Gb/s WDM nets. Riziotis, C., +, *J-LT Aug 03* 1828-1837
- Generation of complex microwave/MM-wave pulses using dispersion and Kerr effect in opt. fiber systs. Levinson, O., +, *J-LT May 2003* 1179-1187
- Genetic algm.-based methodology for optimizing multiservice convergence in metro WDM network. Hyo-Sik Yang, +, *J-LT May 2003* 1114-1133
- GMPLS nets., routing and protection. Elwalid, A., +, *J-LT Nov 03* 2828-2838
- Impact of dispersion fluct. on 40-Gb/s dispersion-managed lightwave systs. Poutrina, E., +, *J-LT Apr 03* 990-996
- implement. of label-controlled arrayed waveguide packet router, opt. IM/FSK coding tech. Vlachos, K., +, *J-LT Nov 03* 2617-2628
- in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. Zalevsky, Z., +, *J-LT Nov 03* 2734-2738
- influence of high optical power light launched into optical fibers in MT connector. Hogari, K., +, *J-LT Dec 03* 3344-3348
- Investigation of syst. upgradability over installed fiber-optic cable using 40-Gb/s WDM sigs. toward multiterabit opt. networks. Otani, T., +, *J-LT Apr 03* 947-952
- IP/MPLS, ASON/GMPLS test bed of IST project LION. Cavazzoni, C., +, *J-LT Nov 03* 2791-2803
- joint multilayer protection, packet-over-opt. nets., cost effectiveness. Chunxiao Chigan, +, *J-LT Nov 03* 2694-2704
- Jones matrix anal. models applied, opt. syst., by high-order PMD, comp. Orlandini, A., +, *J-LT Jun 03* 1456-1464
- laser freq. offset, direct-detect. DPSK/DQPSK systs., robustness. Hoon Kim, +, *J-LT Sep 03* 1887-1891
- long-haul opt. commun. syst. FEC, low-dens. parity check code based. Vasic, B., +, *J-LT Feb 03* 438-446
- long-period gratings, fiber cladding mode sensitivity charactn. Besley, J.A., +, *J-LT Mar 03* 848-853
- matched-clad opt. fibers, variational anal. Chiadini, F., +, *J-LT Jan 03* 96-105
- mean differential group delay of randomly birefr. spun fibers, anal. formula. Galtarossa, A., +, *J-LT Jul 03* 1635-1643
- measurement of gain in pump diode lasers using low-coherence source and synchronous detection. Troger, J., *J-LT Dec 03* 3441-3445
- mm-wave data-modulated opt. sig. generation using opt. injection PLL. Johansson, L.A., +, *J-LT Feb 03* 511-520
- mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. Lim, C., +, *J-LT Oct 03* 2203-2210
- mm-wave WDM-fiber wireless network, wavelength-interleaved OADMs. Marra, C., +, *J-LT Jan 03* 32-39
- Modeling and simul. of next-generation multimode fiber links. Pepeljugoski, P., +, *J-LT May 2003* 1242-1255
- modulator chirp, assessing perform. implications of group delay ripple of dispers. compensating fiber Bragg gratings. Cartledge, J.C., +, *J-LT Jul 03* 1621-1628
- moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. Mrotek, J.L., +, *J-LT Aug 03* 1775-1778
- Monitoring opt. network perform. degrad. due to amp. noise. Kilper, D.C., +, *J-LT May 2003* 1171-1178
- Multilayer soln. for path provisioning in new-generation opt./MPLS networks. Sabella, R., +, *J-LT May 2003* 1141-1155
- multimedia networks, opt. CDMA with time hopping/power control. Yashima, H., +, *J-LT Mar 03* 695-702
- multimedia streams, WDMA nets., efficient protocols. Lixin Wang, +, *J-LT Oct 03* 2123-2144
- multiple beam fiber-optic beamformer with binary array of delay lines. Granieri, S., +, *J-LT Dec 03* (110) Dec 03 3262-3272
- multiwavelength opt. packet-switched network, contention-resoln. schemes. Shun Yao, +, *J-LT Mar 03* 672-683
- multiweight unipolar codes for multimedia opt. CDMA appls., pairwise balanced designs, design. Djordjevic, I.B., +, *J-LT Sep 03* 1850-1856
- near-field and far-field attenuation models for free-space variable optical attenuators. Zhang, X.M., +, *J-LT Dec 03* 3417-3426
- nets., differentiated reliab. Tacca, M., +, *J-LT Nov 03* 2576-2586
- nets., shared risk link groups, trap avoidance and protection schemes. Dahai Xu, +, *J-LT Nov 03* 2683-2693
- NRZ Gb/s opt. transm., higher order polariz.-mode dispersion compensation. Lorenzetto, G., +, *J-LT Feb 03* 424-431
- N×N multiwavelength opt. cross-connect based on tunable FBGs. Nam Su Moon, +, *J-LT Mar 03* 703-718
- optically assisted Internet routing, arrays of dynamically reconfigurable FBG-based correlators. Hauer, M.C., +, *J-LT Nov 03* 2765-2778
- optical networks (special issue). *J-LT Nov 03* 2452-2952
- optical networks (special issue intro.). Jinno, M., +, *J-LT Nov 03* 2452-2454
- packet-over-WDM nets., data-centric networking, multiwavelength headers/labels. Skoufis, C., +, *J-LT Oct 03* 2110-2122
- packet's time-to-live (TTL) field and subsequent dropping of zero-TTL packet, all-opt. decrementing. McGeehan, J.E., +, *J-LT Nov 03* 2746-2752
- packet switching net., enhanced edge routers, end-to-end contention resoln. schemes. Fei Xue, +, *J-LT Nov 03* 2595-2604
- perfluorinated GRIN plastic opt. fiber mode coupling estim. Golowich, S.E., +, *J-LT Jan 03* 111-121
- Performance failure anal. of EDFA cascades in opt. DWDM packet-switched networks. Araci, I.E., +, *J-LT May 2003* 1156-1163
- phase-modulated 40-Gb/s RZ transm., ghost-pulse gener. suppression. Kanaev, A.V., +, *J-LT Jun 03* 1486-1489
- Physical/logical topol. design of large-scale opt. networks. Yufeng Xin, +, *J-LT Apr 03* 904-915
- polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. Bononi, A., +, *J-LT Sep 03* 1903-1913
- polariz.-depend. loss, accurate spectral charactn. Craig, R.M., *J-LT Feb 03* 432-437
- polariz.-depend. loss, opt. fiber transm. systs. with/without polariz.-mode dispers., perform. degrad. induced. Chongjin Xie, +, *J-LT Sep 03* 1953-1957
- prog. group-delay module, binary polariz. switching. Lianshan Yan, +, *J-LT Jul 03* 1676-1684
- Propagation charact. of single-polariz. opt. fiber with, ellipt. core and triple-clad. Furukawa, S., +, *J-LT May 2003* 1307-1312
- Protecting multicast sessions in WDM opt. mesh networks. Singhal, N.K., +, *J-LT Apr 03* 884-892
- pump-wavelength dependence of Raman gain in single-mode optical fibers. Newbury, N.R., *J-LT Dec 03* 3364-3373
- Raman gain coeff., scaling. Rottwitz, K., +, *J-LT Jul 03* 1652-1662
- ratio between phase and group birefringence in optical single-mode fibers. Legre, M., +, *J-LT Dec 03* 3374-3378
- Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. Phua, P.B., +, *J-LT Apr 03* 982-989
- reducing pump-sig. FWM interact., copumped distrib. Raman amps., Raman pump module. Di Pasquale, F., +, *J-LT Aug 03* 1742-1748
- regenerative all-opt. wavel. converter, transparent demons., 42 nodes and 16800 km, nonblocking all-opt. cross connect. Leuthold, J., +, *J-LT Nov 03* 2863-2870
- sig. distortion and crosstalk penalties induced by opt. filters, opt. nets. Downie, J.D., +, *J-LT Sep 03* 1876-1886
- simulating polariz. effects, recirculating fiber loops, loop-sync. polariz. scrambling tech. Yu, Q., +, *J-LT Jul 03* 1593-1600
- simultaneous 3-band modulation and FO transmission of 2.5-Gb/s baseband, microwave-, and 60-GHz-band signals on single wavelength. Ikeda, K., +, *J-LT Dec 03* 3194-3202
- simultaneous transm. of data and digital broadcast video service, bidirectional WDM PON. Son, E.S., +, *J-LT Aug 03* 1723-1727
- single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. Sinkin, O.V., +, *J-LT Jan 03* 61-68
- single-mode fiber PMD, one-input two-output channel representation. Hong Chen, +, *J-LT Mar 03* 743-749
- single-mode opt. fiber arrays, high-precision charactn. Bernussi, A.A., +, *J-LT Jun 03* 1557-1561
- single-mode opt.-fiber cable networks for WDM systs., transm. characts. Hogari, K., +, *J-LT Feb 03* 540-545

sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060

Some enabling techs. for polariz. mode dispersion compensation. *Sandel, D.*, +, *J-LT May 2003* 1198-1210

stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202

step-index multimode opt. fibers, mode conversion coeffs. calc. *Zubia, J.*, +, *J-LT Mar 03* 776-781

stimulated Raman crosstalk, dispers.-managed fiber links, stat. anal. *Yamamoto, T.*, +, *J-LT Oct 03* 2229-2239

survivable multicast sessions against single link failures, opt. WDM mesh nets., provisioning. *Singhal, N.K.*, +, *J-LT Nov 03* 2587-2594

survivable opt. mesh nets., control and mgt. protocols. *Assi, C.*, +, *J-LT Nov 03* 2638-2651

Survivable WDM mesh networks. *Ramamurthy, S.*, +, *J-LT Apr 03* 870-883

sync. WDM systs., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu*, +, *J-LT Jan 03* 40-53

technique for measuring longitudinal distribution of Raman gain characteristics in optical fibers. *Toge, K.*, +, *J-LT Dec 03* 3349-3354

Theoretical anal. of reflectometric meas. in opt. fiber links affected by polariz.-depend. loss. *Galtarossa, A.*, +, *J-LT May 2003* 1233-1241

Third-order dispersion compensation using, phase modulator. *Hellstrom, E.*, +, *J-LT May 2003* 1188-1197

toward Tb/s capacities over multimode fiber lns using SCM/WDM techniques. *Tyler, E.J.*, +, *J-LT Dec 03* 3237-3243

transm. systs., constraint-based design. *Alicherry, M.*, +, *J-LT Nov 03* 2499-2510

transparent ultra-long-haul DWDM nets., broadcast-and-select OADM/OXC archit. *Vasilyev, M.*, +, *J-LT Nov 03* 2661-2672

tree-shared multicast opt. burst-switched WDM networks. *Myoungki Jeong*, +, *J-LT Jan 03* 13-24

ultradense WDM channels, beat-freq.-locking method, accurate alignment. *Sang-Yuep Kim*, +, *J-LT Nov 03* 2891-2894

ultrafast nonlin. interferometer (UNI)-based digital opt. ccts. and their, packet switching. *Bintjas, C.*, +, *J-LT Nov 03* 2629-2637

ultrafast time-domain technol. and appl., all-opt. sig. proc. *Vlachos, K.*, +, *J-LT Sep 03* 1857-1868

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

wavel. channel data rewrite, saturated SOA modulator for WDM nets., centralized light sources. *Takesue, H.*, +, *J-LT Nov 03* 2546-2556

wavelength-flexible network nodes, MEMS-based OXCs and wavelength conversion. *Nuzman, C.*, +, *J-LT Mar 03* 648-663

wavelength multiplexed fiber Bragg gratings, network sens. appls. *Abad, S.*, +, *J-LT Jan 03* 127-131

WDM analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03* 500-505

WDM direct-detect. DPSK systs., cross-PM-induced nonlin. phase noise. *Hoon Kim*, *J-LT Aug 03* 1770-1774

WDM networks, wavelength converter placement, optim. model. *Suixiang Gao*, +, *J-LT Mar 03* 684-694

wide geographical opt. fiber transport networks, Gb/s transm. *Matera, F.*, +, *J-LT Feb 03* 456-465

Optical fiber communication; cf. Optical fiber networks

Optical fiber couplers

epoxy-cured fiber-optic connectors, strain eval. *Broadwater, K.*, +, *J-LT Jul 03* 1668-1675

Fiber-pigtail-detachable plastic MiniDIL transmitter module with, tool-free opt. connector. *Tatsuno, K.*, +, *J-LT Apr 03* 1066-1070

grating-assisted codirectional fiber coupler design. *Brenne, J.K.*, +, *J-LT Jan 03* 254-263

low-loss coupling, polariz.-insensitive microwaves and single-mode opt. fibers, 2D taper. *Vivien, L.*, +, *J-LT Oct 03* 2429-2433

multichannel receptacle PLC modules, waveguide-fiber connector. *Asakawa, S.*, +, *J-LT Mar 03* 821-830

out-of-plane fiber-laser alignment, presence of init. nonplanar misalignments, intell. automation method. *Mondal, S.K.*, +, *J-LT Sep 03* 2061-2066

perfluorinated GRIN plastic opt. fiber mode coupling estim. *Golowich, S.E.*, +, *J-LT Jan 03* 111-121

very-high-dens. 60-fiber connectors, design and perform. *Takaya, M.*, +, *J-LT Jun 03* 1549-1556

wedge-shaped lensed fibers for fiber-laser coupling, design optim. *Yongzhi He*, +, *J-LT Oct 03* 2271-2275

Optical fiber dispersion

3rd.-order dispers. and sideband instabil., single-channel opt. fiber transm. by midway opt. phase conjug. employing higher order dispers. mgt. *Kaewplung, P.*, +, *J-LT Jun 03* 1465-1473

8 × 10-Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03* 1499-1503

adaptive min. MSE controlled PLC opt. equalizer for chromatic dispers. compensation. *Secondini, M.*, +, *J-LT Oct 03* 2322-2331

all-opt. TDM data DEMUX, 80 Gb/s, significant timing jitter tolerance, fiber Bragg grating rect. pulse switching technol. *Ju Han Lee*, +, *J-LT Nov 03* 2518-2523

asynchronous amplif. histogram eval. of NRZ sig., chromatic dispers. depend. *Shake, I.*, +, *J-LT Oct 03* 2154-2161

Brillouin shift, dispers.-shifted fiber and annealing effect, wide-range temp. depend. *Yongqian Li*, +, *J-LT Jul 03* 1663-1667

buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. *Allen, C.T.*, +, *J-LT Jan 03* 79-86

cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. *Jeong, H.*, +, *J-LT Aug 03* 1838-1845

Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang*, +, *J-LT Apr 03* 953-960

correction to "Evaluating the error probability in lightwave systems with chromatic dispersion, arbitrary pulse shape" (Nov 00 1493-1503). *Powell, O.*, *J-LT Mar 03* 868

dense WDM mm-wave-band radio-on-fiber sig. transm., photonic downconversion. *Kuri, T.*, +, *J-LT Jun 03* 1510-1517

Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A.*, +, *J-LT Apr 03* 1071-1082

digital-microwave link, opt. generated elec.-modulation formats. *Candelas, P.*, +, *J-LT Feb 03* 496-499

dispers. compensating Raman amps., pump reflectors for increased effic. *Nicholson, J.W.*, *J-LT Aug 03* 1758-1762

Dispersion-managed high-capacity ultra-long-haul transm. *Suzuki, M.*, +, *J-LT Apr 03* 916-929

dispersion-managed soliton syst. perform., span length random vars. *Chongjin Xie*, +, *J-LT Mar 03* 769-775

dispers. resist., analog radio-on-fiber upconversion links, improv. *Le Guennec, Y.*, +, *J-LT Oct 03* 2211-2216

electrically tunable dispers. compensator, fixed center wavel., fiber Bragg grating. *Ngo, N.Q.*, +, *J-LT Jun 03* 1568-1575

Er³⁺-doped photonic cryst. fiber amplif. props., full vector finite-element modal formulation. *Cucinotta, A.*, +, *J-LT Mar 03* 782-788

evaluating joint second-order PMD stats., fast and accurate method. *Forestieri, E.*, *J-LT Nov 03* 2942-2952

FBG cascades, power penalties due to in-band/out-of-band dispersion. *Yla-Jarkko, K.H.*, +, *J-LT Feb 03* 506-510

fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. *Jecheon Han*, +, *J-LT Jun 03* 1504-1509

Four-wave mixing between pump and sig. in distributed Raman amp. *Tsu-Te Kung*, +, *J-LT May 2003* 1164-1170

freq.-interleaved DWDM mm-wave radio-on-fiber systs., DEMUX, arrayed-waveguide grating. *Toda, H.*, +, *J-LT Aug 03* 1735-1741

high-bandwidth graded-index polymer opt. fiber enabling power penalty-free gigabit data transm. *Ishigure, T.*, +, *J-LT Nov 03* 2923-2930

high-channel-count chromatic dispers. compensation, phased-only sampled fiber Bragg gratings. *Hongpu Li*, +, *J-LT Sep 03* 2074-2083

Impact of dispersion fluc. on 40-Gb/s dispersion-managed lightwave systs. *Poutrina, E.*, +, *J-LT Apr 03* 990-996

Investigation of syst. upgradability over installed fiber-optic cable using 40-Gb/s WDM sigs. toward multiterabit opt. networks. *Otani, T.*, +, *J-LT Apr 03* 947-952

Jones matrix anal. models applied, opt. syst., by high-order PMD, comp. *Orlandini, A.*, +, *J-LT Jun 03* 1456-1464

materials, nonlin. photosensitive response, grating writing model. *Besley, J.A.*, +, *J-LT Oct 03* 2421-2428

mean differential group delay of randomly birefr. spun fibers, anal. formula. *Galtarossa, A.*, +, *J-LT Jul 03* 1635-1643

modulator chirp, assessing perform. implications of group delay ripple of dispers. compensating fiber Bragg gratings. *Cartledge, J.C.*, +, *J-LT Jul 03* 1621-1628

- NRZ Gb/s opt. transm., higher order polariz.-mode dispersion compensation. *Lorenzetto, G.*, +, *J-LT Feb 03* 424-431
- N×N multiwavelength opt. cross-connect based on tunable FBGs. *Nam Su Moon*, +, *J-LT Mar 03* 703-718
- phase-modulated 40-Gb/s RZ transm., ghost-pulse gener. suppression. *Kanaev, A.V.*, +, *J-LT Jun 03* 1486-1489
- photonic cryst. fibers for dispers.-related appls., design. *Lin-Ping Shen*, +, *J-LT Jul 03* 1644-1651
- polariz. changes, Classification and meas., *Stæ. Leo, P.J.*, +, *J-LT Oct 03* 2189-2193
- polariz.-depend. loss, opt. fiber transm. systs. with/without polariz.-mode dispers., perform. degrad. induced. *Chongjin Xie*, +, *J-LT Sep 03* 1953-1957
- polariz. mode dispersion emulation/inversion. *Kogelnik, H.*, +, *J-LT Feb 03* 482-495
- prog. group-delay module, binary polariz. switching. *Lianshan Yan*, +, *J-LT Jul 03* 1676-1684
- Propagation charact. of single-polariz. opt. fiber with, ellipt. core and triple-clad. *Furukawa, S.*, +, *J-LT May 2003* 1307-1312
- pump-modulated FWM scheme, dispers.-shifted fibers, regenerative props. *Bogris, A.*, +, *J-LT Sep 03* 1892-1902
- Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. *Phua, P.B.*, +, *J-LT Apr 03* 982-989
- reducing pump-sig. FWM interact., copumped distrib. Raman amps., Raman pump module. *Di Pasquale, F.*, +, *J-LT Aug 03* 1742-1748
- simulating polariz. effects, recirculating fiber loops, loop-sync. polariz. scrambling tech. *Yu, Q.*, +, *J-LT Jul 03* 1593-1600
- single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V.*, +, *J-LT Jan 03* 61-68
- single-mode fiber PMD, one-input two-output channel representation. *Hong Chen*, +, *J-LT Mar 03* 743-749
- single-mode opt. fiber arrays, high-precision charactn. *Bernussi, A.A.*, +, *J-LT Jun 03* 1557-1561
- single-mode opt-fiber cable networks for WDM systs., transm. characts. *Hogari, K.*, +, *J-LT Feb 03* 540-545
- Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937
- Some enabling techs. for polariz. mode dispersion compensation. *Sandel, D.*, +, *J-LT May 2003* 1198-1210
- stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202
- stimulated Raman crosstalk, dispers.-managed fiber links, stat. anal. *Yamamoto, T.*, +, *J-LT Oct 03* 2229-2239
- Super-DWDM transm. technol. in zero-dispersion region employing distributed Raman amplif. *Suzuki, H.*, +, *J-LT Apr 03* 973-981
- Third-order dispersion compensation using, phase modulator. *Hellstrom, E.*, +, *J-LT May 2003* 1188-1197
- transparent ultra-long-haul DWDM nets., broadcast-and-select OADM/OXC archit. *Vasilyev, M.*, +, *J-LT Nov 03* 2661-2672
- WDM analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03* 500-505
- WDM direct-detect. DPSK systs., cross-PM-induced nonlin. phase noise. *Hoon Kim*, *J-LT Aug 03* 1770-1774
- wide geographical opt. fiber transport networks, Gb/s transm. *Matera, F.*, +, *J-LT Feb 03* 456-465

Optical fiber fabrication

- long period fiber gratings fab., refr. index/temp. sens. appls. *Allsop, T.*, +, *J-LT Jan 03* 264-268
- long-period gratings, fiber cladding mode sensitivity charactn. *Besley, J.A.*, +, *J-LT Mar 03* 848-853
- mean differential group delay of randomly birefr. spun fibers, anal. formula. *Galtarossa, A.*, +, *J-LT Jul 03* 1635-1643
- Novel fiber-optic sens. based on long-period fiber gratings written by HF CO₂ laser pulses. *Yun-Jiang Rao*, +, *J-LT May 2003* 1320-1327
- std. fibers, DUV laser radiation, photosensitization. *Chen, K.P.*, +, *J-LT Sep 03* 1958-1968
- VUV laser-induced refr.-index change and birefr., std. opt. fibers. *Chen, K.P.*, +, *J-LT Sep 03* 1969-1977

Optical fiber filters

- correction to "Evaluating the error probability in lightwave systems with chromatic dispersion, arbitrary pulse shape" (Nov 00 1493-1503). *Powell, O.*, *J-LT Mar 03* 868
- customized ultrahigh repetition rate pulse seqs., superimposed fiber Bragg gratings, gener. *Azana, J.*, +, *J-LT Jun 03* 1490-1498
- FBG cascades, power penalties due to in-band/out-of-band dispersion. *Yla-Jarkko, K.H.*, +, *J-LT Feb 03* 506-510
- gain-flattening filter design, rotationally symmetric crossed gratings. *Lobo, A.E.*, +, *J-LT Sep 03* 2084-2088
- grating-assisted codirectional fiber coupler design. *Brenne, J.K.*, +, *J-LT Jan 03* 254-263
- High-perform. all-fiber Fabry-Perot filters with superimposed chirped Bragg gratings. *Slavik, R.*, +, *J-LT Apr 03* 1059-1065
- mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. *Lim, C.*, +, *J-LT Oct 03* 2203-2210
- mm-wave WDM-fiber wireless network, wavelength-interleaved OADMs. *Marra, C.*, +, *J-LT Jan 03* 32-39
- preamplified receiver perform., VSB filtering, sig. modulation formats. *Jaehoon Lee*, +, *J-LT Feb 03* 521-527
- preamplified receivers with arbitrary opt. filtering, power penalty assess. *Rebola, J.L.*, +, *J-LT Feb 03* 577-578
- pulses-fiber gratings interact. by of joint time-freq. sig. representations. *Azana, J.*, +, *J-LT Nov 03* 2931-2941
- s-band Er-doped fiber amps., multistage config. design, charactn., gain tilt compensation. *Ono, H.*, +, *J-LT Oct 03* 2240-2246
- subband all-pass filter archits., appls., dispers. and dispers.-slope compensation and continuously variable delay lines. *Madsen, C.K.*, *J-LT Oct 03* 2412-2420
- wavelength multiplexed fiber Bragg gratings, network sens. appls. *Abad, S.*, +, *J-LT Jan 03* 127-131

Optical fiber LAN

- all-opt. wavel.-division multiplexed packet nets., collision avoidance. *Elaine Wong*, +, *J-LT Nov 03* 2652-2660
- Development of syst. spec. for laser-optimized 50-μm multimode fiber for multigigabit SW LANs. *Pepejugoski, P.*, +, *J-LT May 2003* 1256-1275
- fiber-to-the-desk appl., ethernet-based pass. opt. LAN. *Radovanovic, I.*, +, *J-LT Nov 03* 2534-2545
- high-bandwidth graded-index polymer opt. fiber enabling power penalty-free gigabit data transm. *Ishigure, T.*, +, *J-LT Nov 03* 2923-2930
- Measurements for enhanced bandwidth perform. over 62.5-μm multimode fiber in SW LAN. *Schlager, J.B.*, +, *J-LT May 2003* 1276-1285
- multiweight unipolar codes for multimedia opt. CDMA appls., pairwise balanced designs, design. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1850-1856
- plastic packaging, low-cost opt. transceiver modules, effective EM shielding. *Tzong-Lin Wu*, +, *J-LT Jun 03* 1536-1543
- wavel./time (W/T) matrix codes for opt. CDMA, design and perform. anal. *Mendez, A.J.*, +, *J-LT Nov 03* 2524-2533

Optical fiber lasers

- 10-W Raman fiber lasers, 1248 nm, phosphosilicate fibers. *Xiong, Z.*, +, *J-LT Oct 03* 2377-2381
- Brillouin fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554
- modeling high-power Er³⁺-Yb³⁺ codoped fiber lasers. *Yahel, E.*, +, *J-LT Sep 03* 2044-2052
- Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937
- widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634

Optical fiber losses

- As-Se IR-transmitting glass fiber opt. loss, heating effects. *Nguyen, V.Q.*, +, *J-LT Jan 03* 122-126
- Distributed fiber Raman amps. with localized loss. *Seung Kwan Kim*, +, *J-LT May 2003* 1286-1293
- Fiber-pigtail-detachable plastic MiniDIL transmitter module with, tool-free opt. connector. *Tatsuno, K.*, +, *J-LT Apr 03* 1066-1070
- High-perform. all-fiber Fabry-Perot filters with superimposed chirped Bragg gratings. *Slavik, R.*, +, *J-LT Apr 03* 1059-1065
- polariz.-depend. loss, accurate spectral charactn. *Craig, R.M.*, *J-LT Feb 03* 432-437
- polariz.-depend. loss, opt. fiber transm. systs. with/without polariz.-mode dispers., perform. degrad. induced. *Chongjin Xie*, +, *J-LT Sep 03* 1953-1957

simulating polariz. effects, recirculating fiber loops, loop-sync. polariz. scrambling tech. Yu, Q., +, *J-LT Jul 03* 1593-1600

single-mode opt.-fiber cable networks for WDM systs., transm. characts. Hogari, K., +, *J-LT Feb 03* 540-545

Theoretical anal. of reflectometric meas. in opt. fiber links affected by polariz.-depend. loss. Galtarossa, A., +, *J-LT May 2003* 1233-1241

Vector wave expansion method for leaky modes of microstruct. opt. fibers. Issa, N.A., +, *J-LT Apr 03* 1005-1012

very-high-dens. 60-fiber connectors, design and perform. Takaya, M., +, *J-LT Jun 03* 1549-1556

Optical fiber networks

optical networks (special issue). *J-LT Nov 03* 2452-2952

optical networks (special issue intro.). Jinno, M., +, *J-LT Nov 03* 2452-2454

Optical fiber networks; cf. Optical fiber LAN

Optical fiber polarization

buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. Allen, C.T., +, *J-LT Jan 03* 79-86

Characterization of stress-applied polariz.-maintaining (PM) fiber through photoelastic tomography. Yongwoo Park, +, *J-LT Apr 03* 997-1004

endless polariz. control algm., adjustable lin. retarders, fixed axes. Martinelli, M., +, *J-LT Sep 03* 2089-2096

evaluating joint second-order PMD sats., fast and accurate method. Forestieri, E., *J-LT Nov 03* 2942-2952

fiber arrays, liq.-cryst. polariz. stabilizers. Hirabayashi, K., +, *J-LT Oct 03* 2162-2171

freq. depend. of DGD, concatenated single-mode fiber systs., anal. form. Yoshida-Dierolf, M., +, *J-LT Oct 03* 2217-2223

gain-flattening filter design, rotationally symmetric crossed gratings. Lobo, A.E., +, *J-LT Sep 03* 2084-2088

High-perform. all-fiber Fabry-Perot filters with superimposed chirped Bragg gratings. Slavik, R., +, *J-LT Apr 03* 1059-1065

Jones matrix anal. models applied, opt. syst., by high-order PMD, comp. Orlandini, A., +, *J-LT Jun 03* 1456-1464

mean differential group delay of randomly birefr. spun fibers, anal. formula. Galtarossa, A., +, *J-LT Jul 03* 1635-1643

NRZ Gb/s opt. transm., higher order polariz.-mode dispersion compensation. Lorenzetto, G., +, *J-LT Feb 03* 424-431

photonic cryst. fiber, birefr., magneto-opt. method/FEA. Peyrilloux, A., +, *J-LT Feb 03* 536-539

polariz. changes, Classification and meas., State. Leo, P.J., +, *J-LT Oct 03* 2189-2193

polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. Bononi, A., +, *J-LT Sep 03* 1903-1913

polariz.-depend. loss, accurate spectral charactn. Craig, R.M., *J-LT Feb 03* 432-437

polariz.-depend. loss, opt. fiber transm. systs. with/without polariz.-mode dispers., perform. degrad. induced. Chongjin Xie, +, *J-LT Sep 03* 1953-1957

polariz. mode dispersion emulation/inversion. Kogelnik, H., +, *J-LT Feb 03* 482-495

prog. group-delay module, binary polariz. switching. Lianshan Yan, +, *J-LT Jul 03* 1676-1684

Propagation charact. of single-polariz. opt. fiber with, ellipt. core and triple-clad. Furukawa, S., +, *J-LT May 2003* 1307-1312

Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. Phua, P.B., +, *J-LT Apr 03* 982-989

simulating polariz. effects, recirculating fiber loops, loop-sync. polariz. scrambling tech. Yu, Q., +, *J-LT Jul 03* 1593-1600

single-mode fiber PMD, one-input two-output channel representation. Hong Chen, +, *J-LT Mar 03* 743-749

Some enabling techs. for polariz. mode dispersion compensation. Sandel, D., +, *J-LT May 2003* 1198-1210

Theoretical anal. of reflectometric meas. in opt. fiber links affected by polariz.-depend. loss. Galtarossa, A., +, *J-LT May 2003* 1233-1241

Optical fibers

customized ultrahigh repetition rate pulse seqs., superimposed fiber Bragg gratings, gener. Azana, J., +, *J-LT Jun 03* 1490-1498

Influence of Bragg gratings phase mismatch in Mach-Zehnder-based ADM. Mechin, D., +, *J-LT May 2003* 1411-1416

perfluorinated GRIN plastic opt. fiber mode coupling estim. Golowich, S.E., +, *J-LT Jan 03* 111-121

photochromic liq.-core fibers, nonlin. input-output characts. Saito, M., +, *J-LT Oct 03* 2255-2261

photonic cryst. fiber, birefr., magneto-opt. method/FEA. Peyrilloux, A., +, *J-LT Feb 03* 536-539

Optical fibers; cf. Optical fiber cladding; Optical fiber couplers; Optical fiber dispersion; Optical fiber fabrication; Optical fiber filters; Optical fiber losses; Optical fiber polarization; Optical fiber testing; Optical fiber theory

Optical fiber testing

As-Se IR-transmitting glass fiber opt. loss, heating effects. Nguyen, V.Q., +, *J-LT Jan 03* 122-126

Brillouin freq. shift and long. acoustic wave, silica opt. fiber, triple-layered struct. Jaewang Yu, +, *J-LT Aug 03* 1779-1786

Characterization of stress-applied polariz.-maintaining (PM) fiber through photoelastic tomography. Yongwoo Park, +, *J-LT Apr 03* 997-1004

double-coated opt. fibers design, polymeric coating longterm tensile-force-induced delamination. Ting-Ying Shen, +, *J-LT Jan 03* 106-110

long-period gratings, fiber cladding mode sensitivity charactn. Besley, J.A., +, *J-LT Mar 03* 848-853

moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. Mrotek, J.L., +, *J-LT Aug 03* 1775-1778

polariz. changes, Classification and meas., State. Leo, P.J., +, *J-LT Oct 03* 2189-2193

single-mode opt. fiber arrays, high-precision charactn. Bernussi, A.A., +, *J-LT Jun 03* 1557-1561

std. fibers, DUV laser radiation, photosensitization. Chen, K.P., +, *J-LT Sep 03* 1958-1968

Theoretical anal. of reflectometric meas. in opt. fiber links affected by polariz.-depend. loss. Galtarossa, A., +, *J-LT May 2003* 1233-1241

Optical fiber theory

anal. of holey opt. fibers, BEM. Ning Guan, +, *J-LT Aug 03* 1787-1792

cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. Jeong, H., +, *J-LT Aug 03* 1838-1845

dispersion-managed soliton syst. perform., span length random vars. Chongjin Xie, +, *J-LT Mar 03* 769-775

double-coated opt. fibers design, polymeric coating longterm tensile-force-induced delamination. Ting-Ying Shen, +, *J-LT Jan 03* 106-110

Er³⁺-doped photonic cryst. fiber amplif. props., full vector finite-element modal formulation. Cucinotta, A., +, *J-LT Mar 03* 782-788

fiber fuse phenom., single-mode opt. fibers, simul. Shuto, Y., +, *J-LT Nov 03* 2511-2517

freq. depend. of DGD, concatenated single-mode fiber systs., anal. form. Yoshida-Dierolf, M., +, *J-LT Oct 03* 2217-2223

gain-flattening filter design, rotationally symmetric crossed gratings. Lobo, A.E., +, *J-LT Sep 03* 2084-2088

Jones matrix anal. models applied, opt. syst., by high-order PMD, comp. Orlandini, A., +, *J-LT Jun 03* 1456-1464

long-period fiber gratings, arbitrary azimuthal/radial refr. index vars., transmittance modelling. Anemogiannis, E., +, *J-LT Jan 03* 218-227

matched-clad opt. fibers, variational anal. Chiadini, F., +, *J-LT Jan 03* 96-105

mean differential group delay of randomly birefr. spun fibers, anal. formula. Galtarossa, A., +, *J-LT Jul 03* 1635-1643

modeling high-power Er³⁺-Yb³⁺ codoped fiber lasers. Yahel, E., +, *J-LT Sep 03* 2044-2052

Modeling of uniaxial anisotropic fibers with noncircular cross sect. by method of lines. Pregla, R., +, *J-LT May 2003* 1294-1299

photonic cryst. fibers for dispers.-related appls., design. Lin-Ping Shen, +, *J-LT Jul 03* 1644-1651

polariz. mode dispersion emulation/inversion. Kogelnik, H., +, *J-LT Feb 03* 482-495

Propagation charact. of single-polariz. opt. fiber with, ellipt. core and triple-clad. Furukawa, S., +, *J-LT May 2003* 1307-1312

Raman amplif. props., triangular photonic cryst. fibers. Fuochi, M., +, *J-LT Oct 03* 2247-2254

single-mode fiber PMD, one-input two-output channel representation. Hong Chen, +, *J-LT Mar 03* 743-749

step-index multimode opt. fibers, mode conversion coeffs. calc. Zubia, J., +, *J-LT Mar 03* 776-781

Vector wave expansion method for leaky modes of microstruct. opt. fibers. Issa, N.A., +, *J-LT Apr 03* 1005-1012

weakly guiding opt. fibers, closed WKB formulas. Paiano, G., +, *J-LT Jan 03* 286-292

wedge-shaped lensed fibers for fiber-laser coupling, design optim. Yongzhi He, +, *J-LT Oct 03* 2271-2275

Optical fiber transducers

Brillouin shift, dispers.-shifted fiber and annealing effect, wide-range temp. depend. Yongqian Li, +, *J-LT Jul 03* 1663-1667

- distributed fiber Bragg grating sens., arrayed waveguide grating fast opt. wavelength interrogator. *Sano, Y.*, +, *J-LT Jan 03* 132-139
- Enhancement of MUX capability of low-coherence interferometric fiber sens. array by use of loop topol. *Libo Yuan*, +, *J-LT May 2003* 1313-1319
- epoxy-cured fiber-optic connectors, strain eval. *Broadwater, K.*, +, *J-LT Jul 03* 1668-1675
- extrinsic Fabry-Perot interferometric opt. fiber sens., strain meas. *Sang-Hoon Kim*, +, *J-LT Mar 03* 797-804
- high-temp. appls., single-cryst. sapphire fiber-based strain sens. *Hai Xiao*, +, *J-LT Oct 03* 2276-2283
- long period fiber gratings fab., refr. index/temp. sens. appls. *Allsop, T.*, +, *J-LT Jan 03* 264-268
- Monitoring technol. of salinity in water with opt. fiber sens. *Yong Zhao*, +, *J-LT May 2003* 1334-1338
- Novel fiber-optic sens. based on long-period fiber gratings written by HF CO₂ laser pulses. *Yun-Jiang Rao*, +, *J-LT May 2003* 1320-1327
- wavelength multiplexed fiber Bragg gratings, network sens. appls. *Abad, S.*, +, *J-LT Jan 03* 127-131
- wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03* 1612-1620

Optical films

- 10- μ m-thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi*, +, *J-LT Jun 03* 1531-1535
- SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836
- thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R.*, +, *J-LT Aug 03* 1820-1827
- Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

Optical films; cf. Optical fiber cladding

Optical filters

- arbitrary opt. filtered opt. preamplified systs., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95
- Estimation of perform. degrad. of bidirectional WDM transm. systs. due to Rayleigh backscatt. and ASE noises using num. and anal. models. *Jeongyun Ko*, +, *J-LT Apr 03* 938-946
- GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
- materials, nonlin. photosensitive response, grating writing model. *Besley, J.A.*, +, *J-LT Oct 03* 2421-2428
- Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. *Phua, P.B.*, +, *J-LT Apr 03* 982-989
- sig. distortion and crosstalk penalties induced by opt. filters, opt. nets. *Downie, J.D.*, +, *J-LT Sep 03* 1876-1886

Optical filters; cf. Optical waveguide filters

Optical frequency conversion

- digital-microwave link, opt. generated elec.-modulation formats. *Candelas, P.*, +, *J-LT Feb 03* 496-499
- Fourier domain planar waveguide Cerenkov SHG. *Hoekstra, H.J.W.M.*, +, *J-LT Jan 03* 299-304
- packet's time-to-live (TTL) field and subsequent dropping of zero-TTL packet, all-opt. decremementing. *McGeehan, J.E.*, +, *J-LT Nov 03* 2746-2752

Optical glass

- hybrid glasses for microoptics, photolithographic proc. *Karkkainen, A.H.O.*, +, *J-LT Mar 03* 614-623
- photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03* 246-253
- SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836
- Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349

Optical hole burning

- cct. model for multiple transverse mode vertical-cavity surface emitting lasers. *Marozsak, T.*, *J-LT Dec 03* 2977-2982
- Spectral hole burning in erbium-doped fiber amps. *Bolshtyansky, M.*, *J-LT Apr 03* 1032-1038

Optical information processing

- microwave photonics (special section). *J-LT Dec 03* 2959-3299
- microwave photonics (special section intro.). *Seeds, A.J.*, +, *J-LT Dec 03* 2959-2961

Optical information processing; cf. Optical tomography

Optical interconnections

- 10- μ m-thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi*, +, *J-LT Jun 03* 1531-1535
- 2D opt.-data links, on-chip parallel FEC appl. *Faucher, J.*, +, *J-LT Feb 03* 466-475
- bidirectional path switched ring networks for photonic IP networks. *Hayashi, M.*, +, *J-LT Feb 03* 356-364
- influence of high optical power light launched into optical fibers in MT connector. *Hogari, K.*, +, *J-LT Dec 03* 3344-3348
- interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280
- MEMS-based opt. cross-connect, time-multiplexed sigs., parallel sig. anal./switch optimiz. *Pau, S.*, +, *J-LT Mar 03* 609-613
- nets., waveband grooming and IP aggregation. *Parthiban, R.*, +, *J-LT Nov 03* 2476-2488
- N $\times$ N multiwavelength opt. cross-connect based on tunable FBGs. *Nam Su Moon*, +, *J-LT Mar 03* 703-718
- Physical/logical topol. design of large-scale opt. networks. *Yufeng Xin*, +, *J-LT Apr 03* 904-915
- substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytsis, E.N.*, +, *J-LT Oct 03* 2382-2394
- two-axis beam-steering micromirrors for large opt. cross-connects. *Aksyuk, V.A.*, +, *J-LT Mar 03* 634-642
- very-high-dens. 60-fiber connectors, design and perform. *Takaya, M.*, +, *J-LT Jun 03* 1549-1556
- wavelength-flexible network nodes, MEMS-based OXCs and wavelength conversion. *Nuzman, C.*, +, *J-LT Mar 03* 648-663

Optical interferometry

- arrayed waveguide grating based opt. devices, phase error meas. *Wei Chen*, +, *J-LT Jan 03* 198-205
- Brillouin fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554
- Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A.*, +, *J-LT Apr 03* 1071-1082
- digital and analog appls., opt. intens. modulators. *Li, G.L.*, +, *J-LT Sep 03* 2010-2030
- dispers. resist., analog radio-on-fiber upconversion links, improv. *Le Guennec, Y.*, +, *J-LT Oct 03* 2211-2216
- electrooptical long-period gratings, reconfigurable p-shifted/Mach-Zehnder bandpass filters. *Kulishov, M.*, +, *J-LT Mar 03* 854-861
- Enhancement of MUX capability of low-coherence interferometric fiber sens. array by use of loop topol. *Libo Yuan*, +, *J-LT May 2003* 1313-1319
- full-cycle-coupler-based opt. ADM and perform. characts., 40-Gb/s WDM nets. *Riziotis, C.*, +, *J-LT Aug 03* 1828-1837
- Generation of complex microwave/MM-wave pulses using dispersion and Kerr effect in opt. fiber systs. *Levinson, O.*, +, *J-LT May 2003* 1179-1187
- High-isolation photonic microwave mixer/link for wideband sig. proc. and transm. *Yongqiang Shi*, +, *J-LT May 2003* 1224-1232
- Influence of Bragg gratings phase mismatch in Mach-Zehnder-based ADM. *Mechin, D.*, +, *J-LT May 2003* 1411-1416
- laser freq. offset, direct-detect. DPSK/DQPSK systs., robustness. *Hoon Kim*, +, *J-LT Sep 03* 1887-1891
- logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583
- opt. regeneration, 40 Gb/s and beyond. *Leclerc, O.*, +, *J-LT Nov 03* 2779-2790
- reson.-cavity LEDs, variable num.-aperture temporal-coherence meas. *Coutinho, R.C.*, +, *J-LT Jan 03* 149-154
- ultrafast nonlin. interferometer (UNI)-based digital opt. ccts. and their, packet switching. *Bintjas, C.*, +, *J-LT Nov 03* 2629-2637

Optical isolators

- Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369

Optical Kerr effect

- Generation of complex microwave/MM-wave pulses using dispersion and Kerr effect in opt. fiber systs. *Levinson, O.*, +, *J-LT May 2003* 1179-1187
- thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R.*, +, *J-LT Aug 03* 1820-1827

- WDM direct-detect. DPSK systs., cross-PM-induced nonlin. phase noise. *Hoon Kim, J-LT Aug 03 1770-1774*
- Optical links**
 adaptive CMOS predistortion linearizer for FO links. *Sadhwani, R., +, J-LT Dec 03 3180-3193*
 analog characterization of low-voltage MQW traveling-wave electroabsorption modulators. *Liu, B., +, J-LT Dec 03 3011-3019*
- Optical logic devices**
 regeneration, 40 Gb/s and beyond. *Leclerc, O., +, J-LT Nov 03 2779-2790*
 ultrafast nonlin. interferometer (UNI)-based digital opt. ccts. and their, packet switching. *Bintjas, C., +, J-LT Nov 03 2629-2637*
- Optical losses**
 2-mode interf. photonic waveguide switch. *Baojun Li, +, J-LT Jul 03 1685-1690*
 2 × 2 3-dB multimode interf. couplers via access waveguide width, optimizing imbalance and loss. *Hill, M.T., +, J-LT Oct 03 2305-2313*
 anal. of bent opt. waveguides, plane-wave boundary method. *Nesterov, A., +, J-LT Oct 03 2434-2437*
 Cross-orthogonality between guided and radiation modes at opt. waveguide discontinuities. *Ramadan, T.A., J-LT May 2003 1394-1404*
 direct UV writing, variable opt. attenuator fabricated. *Svalgaard, M., +, J-LT Sep 03 2097-2103*
 Experimental and num. study of SiON microresonators with air and polymer cladding. *Klunder, D.J.W., +, J-LT Apr 03 1099-1110*
 GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S., +, J-LT Jan 03 170-175*
 glass photonic device fab. by fs laser pulse direct writing. *Florea, C., +, J-LT Jan 03 246-253*
 integr. opt. mirrors, planar waveguide technol., anal. and design. *Wiechmann, S., +, J-LT Jun 03 1584-1591*
 LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang, +, J-LT Jan 03 236-245*
 low-loss coupling, polariz.-insensitive microwaves and single-mode opt. fibers, 2D taper. *Vivien, L., +, J-LT Oct 03 2429-2433*
 Normalized approach for designing cylindrical microresonators. *Klunder, D.J.W., +, J-LT May 2003 1405-1410*
 optoelectromechanical switch array, pass. aligned free-space opt. components. *Ruzzu, A.C.M., +, J-LT Mar 03 664-671*
 planar-photonic crystals, beam steering, superprism to supercollimator. *Lijun Wu, +, J-LT Feb 03 561-566*
 props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A., +, J-LT Aug 03 1813-1819*
 subband all-pass filter archits., appls., dispers. and dispers.-slope compensation and continuously variable delay lines. *Madsen, C.K., J-LT Oct 03 2412-2420*
 switching devices, spatial and spectral resoln. combining photonic cryst. and MOEMS structs. *Letartre, X., +, J-LT Jul 03 1691-1699*
 Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R., +, J-LT Apr 03 1046-1052*
- Optical losses; cf.** Optical fiber losses
- Optical materials**
 digital and analog appls., opt. intens. modulators. *Li, G.L., +, J-LT Sep 03 2010-2030*
 high-speed electrooptic modulator charactn., opt. spectrum anal. *Yongqiang Shi, +, J-LT Oct 03 2358-2367*
 Optical elec.-power sens. by use of one BGO cryst. *Changsheng Li, +, J-LT May 2003 1328-1333*
- Optical materials; cf.** Optical glass; Optical polymers; Photorefractive materials
- Optical measurements**
 polariz. depend. of OLCR, act. Faraday rotator. *Takada, K., J-LT Nov 03 2916-2922*
- Optical memories**
 1 × 2 all-opt. packet switch, all-opt. sig. proc. methods. *Dorren, H.J.S., +, J-LT Jan 03 2-12*
- Optical mixing**
 Four-wave mixing between pump and sig. in distributed Raman amp. *Tsui Kung, +, J-LT May 2003 1164-1170*
 phase-modulated 40-Gb/s RZ transm., ghost-pulse gener. suppression. *Kanaev, A.V., +, J-LT Jun 03 1486-1489*
 pump-modulated FWM scheme, dispers.-shifted fibers, regenerative props. *Bogris, A., +, J-LT Sep 03 1892-1902*
 reducing pump-sig. FWM interact., copumped distrib. Raman amps., Raman pump module. *Di Pasquale, F., +, J-LT Aug 03 1742-1748*
 single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V., +, J-LT Jan 03 61-68*
 spectrum-sliced incoherent light for wide-area access net., super-DWDM transm. *Akimoto, K., +, J-LT Nov 03 2715-2722*
 sync. WDM systs., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu, +, J-LT Jan 03 40-53*
- Optical modulation**
 120-GHz wireless link, photonic techs. for gener., modulation, emission of mm-wave sigs. *Hirata, A., +, J-LT Oct 03 2145-2153*
 2-mode interf. photonic waveguide switch. *Baojun Li, +, J-LT Jul 03 1685-1690*
 Analog laser predistortion for multiservice radio-over-fiber systs. *Roselli, L., +, J-LT May 2003 1211-1223*
 coded PSK for fiber-optic commun., spectral effic. *Kramer, G., +, J-LT Oct 03 2438-2445*
 Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang, +, J-LT Apr 03 953-960*
 customized ultrahigh repetition rate pulse seqs., superimposed fiber Bragg gratings, gener. *Azana, J., +, J-LT Jun 03 1490-1498*
 designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi, +, J-LT Oct 03 2314-2321*
 Dispersion-managed high-capacity ultra-long-haul transm. *Suzuki, M., +, J-LT Apr 03 916-929*
 DPSK and OOK WDM transm., transoceanic dists. and their perform. degradations, nonlin. phase noise, comparative study. *Mizuochi, T., +, J-LT Sep 03 1933-1943*
 Efficiency improvement of opt. fiber wavelength converter without spectral spread using sync. phase/FM. *Torii, K., +, J-LT Apr 03 1039-1045*
 electrically tunable dispers. compensator, fixed center wavel., fiber Bragg grating. *Ngo, N.Q., +, J-LT Jun 03 1568-1575*
 embedded transm. scheme, PPM signaling, symmetric error-correcting codes for opt. CDMA. *Kamakura, K., +, J-LT Jul 03 1601-1611*
 Generation of complex microwave/MM-wave pulses using dispersion and Kerr effect in opt. fiber systs. *Levinson, O., +, J-LT May 2003 1179-1187*
 high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D., +, J-LT Mar 03 750-758*
 microwave photonic direct-sequence transmitter and heterodyne correlation receiver. *Funk, E.E., +, J-LT Dec 03 2962-2967*
 mm-wave data-modulated opt. sig. generation using opt. injection PLL. *Johansson, L.A., +, J-LT Feb 03 511-520*
 mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. *Lim, C., +, J-LT Oct 03 2203-2210*
 mm-wave WDM-fiber wireless network, wavelength-interleaved OADMs. *Marra, C., +, J-LT Jan 03 32-39*
 modulator chirp, assessing perform. implications of group delay ripple of dispers. compensating fiber Bragg gratings. *Cartledge, J.C., +, J-LT Jul 03 1621-1628*
 phase-modulated 40-Gb/s RZ transm., ghost-pulse gener. suppression. *Kanaev, A.V., +, J-LT Jun 03 1486-1489*
 polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. *Bononi, A., +, J-LT Sep 03 1903-1913*
 preamplified receiver perform., VSB filtering, sig. modulation formats. *Jaehoon Lee, +, J-LT Feb 03 521-527*
 pump-modulated FWM scheme, dispers.-shifted fibers, regenerative props. *Bogris, A., +, J-LT Sep 03 1892-1902*
 Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan, +, J-LT Apr 03 930-937*
 stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou, +, J-LT Oct 03 2194-2202*
 sync. WDM systs., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu, +, J-LT Jan 03 40-53*
 Third-order dispersion compensation using, phase modulator. *Hellstrom, E., +, J-LT May 2003 1188-1197*
 toward Tb/s capacities over multimode fiber links using SCM/WDM techniques. *Tyler, E.J., +, J-LT Dec 03 3237-3243*
 Wavelength conversion of SCM sigs. using SOA, theory, expts., and appls. *Capmany, J., +, J-LT Apr 03 961-972*

Optical modulation; cf. Electro-optical modulation; Optical pulse compression; Spatial light modulators

Optical modulation/demodulation
regeneration, 40 Gb/s and beyond. *Leclerc, O.*, +, *J-LT Nov 03* 2779-2790

Optical neural nets

optical subcarrier label swapping by semiconductor optical amplifiers. *Udvary, E.*, +, *J-LT Dec 03* 3221-3225

RF photonics signal processing in subcarrier multiplexed optical-label switching communication sys. *Zhu, Z.*, +, *J-LT Dec 03* 3155-3166

Optical noise

arbitrary opt. filtered opt. preamplified sys., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95

burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575

Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. sys. *Zhi Jiang*, +, *J-LT Apr 03* 953-960

correction to "Evaluating the error probability in lightwave systems with chromatic dispersion, arbitrary pulse shape" (Nov 00 1493-1503). *Powell, O.*, *J-LT Mar 03* 868

data and voice integrat. over DWDM MAN. *Stavdas, A.*, +, *J-LT Feb 03* 372-383

fiber commun. sys., ASE noise dominated, turbo code decoder perform. *Yi Cai*, +, *J-LT Mar 03* 727-734

in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. *Zalevsky, Z.*, +, *J-LT Nov 03* 2734-2738

polariz.-depend. loss, opt. fiber transm. sys. with/without polariz.-mode dispers., perform. degrad. induced. *Chongjin Xie*, +, *J-LT Sep 03* 1953-1957

preamplified receivers with arbitrary opt. filtering, power penalty assess. *Rebola, J.L.*, +, *J-LT Feb 03* 577-578

wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03* 1612-1620

Optical noise; cf. Laser noise

Optical parametric amplifiers

amps., noise. *Yamamoto, Y.*, +, *J-LT Nov 03* 2895-2915

Optical parametric devices; cf. Optical parametric amplifiers

Optical phase conjugation

3rd.-order dispers. and sideband instabil., single-channel opt. fiber transm. by midway opt. phase conjug. employing higher order dispers. mgt. *Kaewplung, P.*, +, *J-LT Jun 03* 1465-1473

Optical phase locked loops

mm-wave data-modulated opt. sig. generation using opt. injection PLL. *Johansson, L.A.*, +, *J-LT Feb 03* 511-520

Optical planar waveguides

amps., index contrast scaling. *Saini, S.*, +, *J-LT Oct 03* 2368-2376

birefr. control. *Xiuli Zhao*, +, *J-LT Oct 03* 2352-2357

designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi*, +, *J-LT Oct 03* 2314-2321

electrooptical long-period gratings, reconfigurable p-shifted/Mach-Zehnder bandpass filters. *Kulishov, M.*, +, *J-LT Mar 03* 854-861

Fourier domain planar waveguide Cerenkov SHG. *Hoekstra, H.J.W.M.*, +, *J-LT Jan 03* 299-304

germano-silica planar waveguides, 157-nm F₂ laser radiation photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148

integr. opt. mirrors, planar waveguide technol., anal. and design. *Wiechmann, S.*, +, *J-LT Jun 03* 1584-1591

Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098

N $\times$ several tens of Gb/s WDM transm., integr.-optic dispers. slope equalizer. *Takiguchi, K.*, +, *J-LT Nov 03* 2463-2469

simultaneous label swapping and wavel. conversion of multiple independent WDM channels, all-opt. MPLS net., PPLN waveguides, wavel. convert. *Gurkan, D.*, +, *J-LT Nov 03* 2739-2745

Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820

slanted sidewall high index contrast planar silica waveguides, polariz. crosstalk. *Somasiri, N.*, +, *J-LT Jan 03* 54-60

subband all-pass filter archits., appls., dispers. and dispers.-slope compensation and continuously variable delay lines. *Madsen, C.K.*, *J-LT Oct 03* 2412-2420

Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R.*, +, *J-LT Apr 03* 1046-1052

transverse anisotropic media, finite-element vector beam propag. method. *da Silva, J.P.*, +, *J-LT Feb 03* 567-576

Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

Optical polarizati on

Channel drop filter using, single defect in 2-D photonic cryst. slab-defect engng. with respect to polariz. mode and ratio of emissions from upper and lower sides. *Asano, T.*, +, *J-LT May 2003* 1370-1376

Experimental and num. study of SiON microresonators with air and polymer cladding. *Klunder, D.J.W.*, +, *J-LT Apr 03* 1099-1110

fiber arrays, liq.-cryst. polariz. stabilizers. *Hirabayashi, K.*, +, *J-LT Oct 03* 2162-2171

high-output-power polariz.-insensitive SOA, WDM syst. switching elements. *Morito, K.*, +, *J-LT Jan 03* 176-181

LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245

optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H.*, +, *J-LT Jun 03* 1544-1548

opt. injection, VCSEL polariz. control. *Bandyopadhyay, S.*, +, *J-LT Oct 03* 2395-2404

polariz. depend. of OLCR, act. Faraday rotator. *Takada, K.*, *J-LT Nov 03* 2916-2922

slanted sidewall high index contrast planar silica waveguides, polariz. crosstalk. *Somasiri, N.*, +, *J-LT Jan 03* 54-60

sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060

Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

Optical polymers

digital and analog appls., opt. intens. modulators. *Li, G.L.*, +, *J-LT Sep 03* 2010-2030

E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304

Experimental and num. study of SiON microresonators with air and polymer cladding. *Klunder, D.J.W.*, +, *J-LT Apr 03* 1099-1110

fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. *Jecheon Han*, +, *J-LT Jun 03* 1504-1509

high-bandwidth graded-index polymer opt. fiber enabling power penalty-free gigabit data transm. *Ishigure, T.*, +, *J-LT Nov 03* 2923-2930

perfluorinated GRIN plastic opt. fiber mode coupling estim. *Golowich, S.E.*, +, *J-LT Jan 03* 111-121

Polymer-based 1 $\times$ 6 thermooptic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang*, +, *J-LT Apr 03* 1053-1058

single-chip integrated EO polymer photonic RF phase shifter array. *Han, J.*, +, *J-LT Dec 03* 3257-3261

sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060

substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytsis, E.N.*, +, *J-LT Oct 03* 2382-2394

Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

two-photon laser precision microfab., nanophotonic/opt. MEMS appls. *Hong-Bo Sun*, +, *J-LT Mar 03* 624-633

Optical propagation

integrated opt. devices, time-domain beam-propag. method. *Bravo-Roger, L.L.*, +, *J-LT Feb 03* 577

planar-photonic crystals, beam steering, superprism to supercollimator. *Lijun Wu*, +, *J-LT Feb 03* 561-566

Optical propagation in absorbing media

fiber fuse phenom., single-mode opt. fibers, simul. *Shuto, Y.*, +, *J-LT Nov 03* 2511-2517

Optical propagation in dispersive media

dyn. spectral equalizer, free-space dispers. optics combined, PDLC spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073

planar-photonic crystals, beam steering, superprism to supercollimator. *Lijun Wu*, +, *J-LT Feb 03* 561-566

Optical properties; cf. Birefringence; Optical Kerr effect; Optical losses; Optical noise; Optical saturation; Photochromism; Reflectivity

Optical pulse compression

Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937

Optical pumping

8×10 -Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03* 1499-1503

amps., index contrast scaling. *Saini, S.*, +, *J-LT Oct 03* 2368-2376

Brillouin fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554

Brillouin freq. shift and long. acoustic wave, silica opt. fiber, triple-layered struct. *Jaewang Yu*, +, *J-LT Aug 03* 1779-1786

Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang*, +, *J-LT Apr 03* 953-960

dispers. compensating Raman amps., pump reflectors for increased effic. *Nicholson, J.W.*, *J-LT Aug 03* 1758-1762

Distributed fiber Raman amps. with localized loss. *Seung Kwan Kim*, +, *J-LT May 2003* 1286-1293

double-clad fiber amps. for high-power pulse amplif., dyn. characts. *Yong Wang*, +, *J-LT Oct 03* 2262-2270

dual-order Raman fiber amps., RIN transfer meas. and modeling. *Mermelstein, M.D.*, +, *J-LT Jun 03* 1518-1523

Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao*, +, *J-LT Jan 03* 160-169

Four-wave mixing between pump and sig. in distributed Raman amp. *Tsu-Te Kung*, +, *J-LT May 2003* 1164-1170

GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S.*, +, *J-LT Jan 03* 170-175

Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369

lightwave switching in semiconductor microring devices by free carrier injection. *Ibrahim, T.A.*, +, *J-LT Dec 03* 2997-3003

Performance failure anal. of EDFA cascades in opt. DWDM packet-switched networks. *Araci, I.E.*, +, *J-LT May 2003* 1156-1163

polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. *Bononi, A.*, +, *J-LT Sep 03* 1903-1913

pump-modulated FWM scheme, dispers.-shifted fibers, regenerative props. *Bogris, A.*, +, *J-LT Sep 03* 1892-1902

reducing pump-sig. FWM interact., copumped distrib. Raman amps., Raman pump module. *Di Pasquale, F.*, +, *J-LT Aug 03* 1742-1748

Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349

stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202

Super-DWDM transm. technol. in zero-dispersion region employing distributed Raman amplif. *Suzuki, H.*, +, *J-LT Apr 03* 973-981

sync. WDM systs., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu*, +, *J-LT Jan 03* 40-53

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634

Optical receivers

8×10 -Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03* 1499-1503

arbitrary opt. filtered opt. preamplified systs., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95

burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575

direct-detect. opt. CDMA receiver, interf. estim. and double opt. hardlimiters. *Wakafuji, K.*, +, *J-LT Oct 03* 2182-2188

direct-detect. transm. syst. perform., laser noise influence. *Morgado, J.A.P.*, +, *J-LT Mar 03* 759-768

error probab., presence of in-band crosstalk noise, WDM nets., accurate estim. *Kamalakis, T.*, +, *J-LT Oct 03* 2172-2181

high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03* 750-758

high-efficiency optical-microwave mixing approach. *Jaro, G.*, +, *J-LT Dec 03* 3078-3084

interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280

Measurements for enhanced bandwidth perform. over 62.5- μ m multimode fiber in SW LAN. *Schlager, J.B.*, +, *J-LT May 2003* 1276-1285

multichannel receptacle PLC modules, waveguide-fiber connector. *Asakawa, S.*, +, *J-LT Mar 03* 821-830

multimedia streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03* 2123-2144

nanosatellite cluster-detector array receiver laser commun. *Bushuev, D.*, +, *J-LT Feb 03* 447-455

orthogonal codes for incoherent opt. CDMA systs., combinat. constr. *Djordjevic, I.B.*, +, *J-LT Sep 03* 1869-1875

Performance failure anal. of EDFA cascades in opt. DWDM packet-switched networks. *Araci, I.E.*, +, *J-LT May 2003* 1156-1163

Physical/logical topol. design of large-scale opt. networks. *Yufeng Xin*, +, *J-LT Apr 03* 904-915

plastic packaging, low-cost opt. transceiver modules, effective EM shielding. *Tzong-Lin Wu*, +, *J-LT Jun 03* 1536-1543

preamplified receiver perform., VSB filtering, sig. modulation formats. *Jaehoon Lee*, +, *J-LT Feb 03* 521-527

preamplified receivers with arbitrary opt. filtering, power penalty assess. *Rebola, J.L.*, +, *J-LT Feb 03* 577-578

Optical reflection

extrinsic Fabry-Perot interferometric opt. fiber sens., strain meas. *Sang-Hoon Kim*, +, *J-LT Mar 03* 797-804

paraxial approx. for stable and efficient reflective BPM, preconditioner. *Ning-Ning Feng*, +, *J-LT Sep 03* 1996-2001

photonic devices by gen. space mapping tech., modeling and simul. *Ning-Ning Feng*, +, *J-LT Jun 03* 1562-1567

Polymer-based 1×6 thermooptic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang*, +, *J-LT Apr 03* 1053-1058

std. fibers, DUV laser radiation, photosensitization. *Chen, K.P.*, +, *J-LT Sep 03* 1958-1968

wedge-shaped lensed fibers for fiber-laser coupling, design optim. *Yongzhi He*, +, *J-LT Oct 03* 2271-2275

Optical refraction

cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. *Jeong, H.*, +, *J-LT Aug 03* 1838-1845

comput. opt. waveguides, discontinuous refr. index profiles, spectral collocation method, domain decomp., efficient method. *Chia-Chien Huang*, +, *J-LT Oct 03* 2284-2296

germano-silica planar waveguides, 157-nm F_2 laser radiation photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148

glass photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03* 246-253

high-bandwidth graded-index polymer opt. fiber enabling power penalty-free gigabit data transm. *Ishigure, T.*, +, *J-LT Nov 03* 2923-2930

hybrid glasses for microoptics, photolithographic proc. *Karkkainen, A.H.O.*, +, *J-LT Mar 03* 614-623

integr. opt. waveguides, vectorial BEM anal. *Tao Lu*, +, *J-LT Aug 03* 1793-1807

long-period fiber gratings, arbitrary azimuthal/radial refr. index vars., transmittance modelling. *Anemogiannis, E.*, +, *J-LT Jan 03* 218-227

opt. amps., index contrast scaling. *Saini, S.*, +, *J-LT Oct 03* 2368-2376

opt. pulses-fiber gratings interact. by of joint time-freq. sig. representations. *Azana, J.*, +, *J-LT Nov 03* 2931-2941

slanted sidewall high index contrast planar silica waveguides, polariz. crosstalk. *Somasiri, N.*, +, *J-LT Jan 03* 54-60

std. fibers, DUV laser radiation, photosensitization. *Chen, K.P.*, +, *J-LT Sep 03* 1958-1968

step-index multimode opt. fibers, mode conversion coeffs. calc. *Zubia, J.*, +, *J-LT Mar 03* 776-781

three-interface surface plasmon reson. opt. temp. sens. *Ozdemir, S.K.*, +, *J-LT Mar 03* 805-814

Tunable planar polymer Bragg gratings having exceptionally low polariz. sensitivity. *Han Zou*, +, *J-LT Apr 03* 1083-1088

VUV laser-induced refr.-index change and birefr., std. opt. fibers. *Chen, K.P.*, +, *J-LT Sep 03* 1969-1977

Optical repeaters

all-opt. packet switching routers, opt. label swapping and 2R regeneration for scalable opt. label switching net. appls., demons. *Min Yong Jeon*, +, *J-LT Nov 03* 2723-2733

amps., noise. *Yamamoto, Y.*, +, *J-LT Nov 03* 2895-2915

regeneration, 40 Gb/s and beyond. *Leclerc, O.*, +, *J-LT Nov 03* 2779-2790

regenerative all-opt. wavel. converter, transparent demons., 42 nodes and 16800 km, nonblocking all-opt. cross connect. *Leuthold, J.*, +, *J-LT Nov 03* 2863-2870

Optical resonators

ellipt. whispering-gallery-mode microdisk waveguide filters, tuning. *Boriskina, S.V.*, +, *J-LT Sep 03* 1987-1995

Experimental and num. study of SiON microresonators with air and polymer cladding. *Klunder, D.J.W.*, +, *J-LT Apr 03* 1099-1110

reson.-cavity LEDs, variable num.-aperture temporal-coherence meas. *Coutinho, R.C.*, +, *J-LT Jan 03* 149-154

subband all-pass filter archits., appls., dispers. and dispers.-slope compensation and continuously variable delay lines. *Madsen, C.K.*, *J-LT Oct 03* 2412-2420

Optical resonators; cf. Fabry-Perot resonators

Optical saturation

Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao*, +, *J-LT Jan 03* 160-169

regeneration, 40 Gb/s and beyond. *Leclerc, O.*, +, *J-LT Nov 03* 2779-2790

wavel. channel data rewrite, saturated SOA modulator for WDM nets., centralized light sources. *Takesue, H.*, +, *J-LT Nov 03* 2546-2556

WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485

Optical scattering

grating-assisted codirectional fiber coupler design. *Brenne, J.K.*, +, *J-LT Jan 03* 254-263

integr. opt. mirrors, planar waveguide technol., anal. and design. *Wiechmann, S.*, +, *J-LT Jun 03* 1584-1591

Optical self-focusing; cf. Optical Kerr effect

Optical signal detection

asynchronous amplit. histogram eval. of NRZ sig., chromatic dispers. depend. *Shake, I.*, +, *J-LT Oct 03* 2154-2161

coded PSK for fiber-optic commun., spectral effic. *Kramer, G.*, +, *J-LT Oct 03* 2438-2445

direct-detect. opt. CDMA receiver, interf. estim. and double opt. hardlimiters. *Wakafuji, K.*, +, *J-LT Oct 03* 2182-2188

direct-detect. transm. syst. perform., laser noise influence. *Morgado, J.A.P.*, +, *J-LT Mar 03* 759-768

in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. *Zalevsky, Z.*, +, *J-LT Nov 03* 2734-2738

photonic time-stretched ADC: fundamental concepts and practical considerations. *Han, Y.*, +, *J-LT Dec 03* 3085-3103

real-time detection of femtosecond optical pulse sequences via time-to space conversion in lightwave communications band. *Chung, J.-H.*, +, *J-LT Dec 03* 3323-3333

Optical solitons

all-opt. TDM data DEMUX, 80 Gb/s, significant timing jitter tolerance, fiber Bragg grating rect. pulse switching technol. *Ju Han Lee*, +, *J-LT Nov 03* 2518-2523

Dispersion-managed high-capacity ultra-long-haul transm. *Suzuki, M.*, +, *J-LT Apr 03* 916-929

dispersion-managed soliton syst. perform., span length random vars. *Chongjin Xie*, +, *J-LT Mar 03* 769-775

dual Mach-Zehnder modulator opt. transmitters, high-speed data, pulse-carver alignment. *Sinsky, J.H.*, *J-LT Feb 03* 412-423

Generation of complex microwave/MM-wave pulses using dispersion and Kerr effect in opt. fiber systs. *Levinson, O.*, +, *J-LT May 2003* 1179-1187

Impact of dispersion fluc. on 40-Gb/s dispersion-managed lightwave systs. *Poutrina, E.*, +, *J-LT Apr 03* 990-996

Investigation of syst. upgradability over installed fiber-optic cable using 40-Gb/s WDM sigs. toward multiterabit opt. networks. *Otani, T.*, +, *J-LT Apr 03* 947-952

regeneration, 40 Gb/s and beyond. *Leclerc, O.*, +, *J-LT Nov 03* 2779-2790

single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V.*, +, *J-LT Jan 03* 61-68

Optical spectroscopy

photochromic liq.-core fibers, nonlin. input-output characts. *Saito, M.*, +, *J-LT Oct 03* 2255-2261

Optical subscriber loops

aerial distrib. cable/feeder sects., fiber access networks. *Kawataka, J.*, +, *J-LT Mar 03* 789-796

alg. congruent codes used 2D OCDMA syst., research. *Tao Pu*, +, *J-LT Nov 03* 2557-2564

burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575

carrier supply module, flattened opt. multicarrier gener., sinusoidal amplit. and phase hybrid modulation. *Fujiwara, M.*, +, *J-LT Nov 03* 2705-2714

Development of syst. spec. for laser-optimized 50- μ m multimode fiber for multigigabit SW LANs. *Pepeljugoski, P.*, +, *J-LT May 2003* 1256-1275

DWDM/SCM self-healing archit. for broad-band subscriber networks. *Wen-Piao Lin*, +, *J-LT Feb 03* 319-328

N $\times$ N multiwavelength opt. cross-connect based on tunable FBGs. *Nam Su Moon*, +, *J-LT Mar 03* 703-718

spectrum-sliced incoherent light for wide-area access net., super-DWDM transm. *Akimoto, K.*, +, *J-LT Nov 03* 2715-2722

very-high-dens. 60-fiber connectors, design and perform. *Takaya, M.*, +, *J-LT Jun 03* 1549-1556

Wavelength conversion of SCM sigs. using SOA, theory, expts., and appls. *Capmany, J.*, +, *J-LT Apr 03* 961-972

Optical switches

Array interconnection for rearrangeable 2D MEMS opt. switch. *Teck Yoong Chai*, +, *J-LT May 2003* 1134-1140

Cell-sorting device for creating sync. variable-length opt. packet switches. *Lin, P.J.*, +, *J-LT Apr 03* 893-903

direct optical switching CDMA syst. for FO radio highway networks. *Tsakamoto, K.*, +, *J-LT Dec 03* 3209-3220

lightwave switching in semiconductor microring devices by free carrier injection. *Ibrahim, T.A.*, +, *J-LT Dec 03* 2997-3003

multichannel receptacle PLC modules, waveguide-fiber connector. *Asakawa, S.*, +, *J-LT Mar 03* 821-830

optoelectromechanical switch array, pass. aligned free-space opt. components. *Ruzzu, A.C.M.*, +, *J-LT Mar 03* 664-671

Polymer-based 1 $\times$ 6 thermooptic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang*, +, *J-LT Apr 03* 1053-1058

prog. group-delay module, binary polariz. switching. *Lianshan Yan*, +, *J-LT Jul 03* 1676-1684

Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R.*, +, *J-LT Apr 03* 1046-1052

Optical switches; cf. Photonic switching systems

Optical testing; cf. Optical fiber testing

Optical time-domain reflectometry

extended optical fiber line testing syst. using eight-channel L/U-band crossed optical waveguide coupler for L-band WDM transmission. *Araki, N.*, +, *J-LT Dec 03* 3316-3322

MEMS-based opt. cross-connect, time-multiplexed sigs., parallel sig. anal./switch optimiz. *Pau, S.*, +, *J-LT Mar 03* 609-613

Optical tomography

Characterization of stress-applied polariz.-maintaining (PM) fiber through photoelastic tomography. *Yongwoo Park*, +, *J-LT Apr 03* 997-1004

Optical transducers

integrated laser blood flowmeter by micromachining and surface mount techs. *Higurashi, E.*, +, *J-LT Mar 03* 591-595

Optical elec.-power sens. by use of one BGO cryst. *Changsheng Li*, +, *J-LT May 2003* 1328-1333

Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820

three-interface surface plasmon reson. opt. temp. sens. *Ozdemir, S.K.*, +, *J-LT Mar 03* 805-814

Optical transfer functions

dual-order Raman fiber amps., RIN transfer meas. and modeling. *Mermelstein, M.D.*, +, *J-LT Jun 03* 1518-1523

Modeling and simul. of next-generation multimode fiber links. *Pepeljugoski, P.*, +, *J-LT May 2003* 1242-1255

nanosatellite cluster-detector array receiver laser commun. *Bushuev, D.*, +, *J-LT Feb 03* 447-455

preamplified receivers with arbitrary opt. filtering, power penalty assess. *Rebola, J.L.*, +, *J-LT Feb 03* 577-578

pump-modulated FWM scheme, dispers.-shifted fibers, regenerative props. *Bogris, A.*, +, *J-LT Sep 03* 1892-1902

reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M.*, +, *J-LT Sep 03* 2031-2043

Third-order dispersion compensation using, phase modulator. *Hellstrom, E.*, +, *J-LT May 2003* 1188-1197

Optical transmitters

120-GHz wireless link, photonic techs. for gener., modulation, emission of mm-wave sigs. *Hirata, A.*, +, *J-LT Oct 03* 2145-2153
 carrier supply module, flattened opt. multicarrier gener., sinusoidal amplit. and phase hybrid modulation. *Fujiwara, M.*, +, *J-LT Nov 03* 2705-2714
 cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197
 direct-detect. transm. syst. perform., laser noise influence. *Morgado, J.A.P.*, +, *J-LT Mar 03* 759-768
 dual Mach-Zehnder modulator opt. transmitters, high-speed data, pulse-carver alignment. *Sinsky, J.H.*, *J-LT Feb 03* 412-423
 Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019
 Fiber-pigtail-detachable plastic MiniDIL transmitter module with, tool-free opt. connector. *Tatsuno, K.*, +, *J-LT Apr 03* 1066-1070
 high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03* 750-758
 high-speed directly modulated Fabry-Perot/DFB spot-size-converted lasers, uncooled telecomm. environ. *Klotzkin, D.*, +, *J-LT Jan 03* 69-78
 interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280
 LiNbO₃ modulator based 10-Gb/s transmitters, SOA booster amps. *Yonggyoo Kim*, +, *J-LT Feb 03* 476-481
 Measurements for enhanced bandwidth perform. over 62.5- μ m multimode fiber in SW LAN. *Schlager, J.B.*, +, *J-LT May 2003* 1276-1285
 Modeling and simul. of next-generation multimode fiber links. *Pepeljugoski, P.*, +, *J-LT May 2003* 1242-1255
 multichannel receptacle PLC modules, waveguide-fiber connector. *Asakawa, S.*, +, *J-LT Mar 03* 821-830
 multimedia streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03* 2123-2144
 Physical/logical topol. design of large-scale opt. networks. *Yufeng Xin*, +, *J-LT Apr 03* 904-915
 plastic packaging, low-cost opt. transceiver modules, effective EM shielding. *Tzong-Lin Wu*, +, *J-LT Jun 03* 1536-1543
 spectrum-sliced incoherent light for wide-area access net., super-DWDM transm. *Akimoto, K.*, +, *J-LT Nov 03* 2715-2722
 ultra-high-capacity IP routers, opt. switch fabrics. *Gripp, J.*, +, *J-LT Nov 03* 2839-2850
 WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485

Optical tuning; cf. Laser tuning

Optical variables control

endless polariz. control algm., adjustable lin. retarders, fixed axes. *Martinelli, M.*, +, *J-LT Sep 03* 2089-2096
 graded SCH VCSELs, reson.-wavelength control/opt.-confine. anal. *Wei-Choon Ng*, +, *J-LT Feb 03* 555-560

Optical variables measurement

As-Se IR-transmitting glass fiber opt. loss, heating effects. *Nguyen, V.Q.*, +, *J-LT Jan 03* 122-126
 glass photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03* 246-253
 low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S.*, +, *J-LT Jan 03* 211-217

Optical waveguide components

extended optical fiber line testing system using eight-channel L/U-band crossed optical waveguide coupler for L-band WDM transmission. *Araki, N.*, +, *J-LT Dec 03* 3316-3322
 Polymer-based 1 $\times$ 6 thermooptic switch incorporating, ellipt. TIR waveguide mirror. *Chiou-Hung Jang*, +, *J-LT Apr 03* 1053-1058
 Theoretical anal. of integrated collimating waveguide lens. *Mackenzie, M.R.*, +, *J-LT Apr 03* 1046-1052

Optical waveguide components; cf. Optical couplers; Optical waveguide filters

Optical waveguide filters

Channel drop filter using, single defect in 2-D photonic cryst. slab-defect engng. with respect to polariz. mode and ratio of emissions from upper and lower sides. *Asano, T.*, +, *J-LT May 2003* 1370-1376
 ellipt. whispering-gallery-mode microdisk waveguide filters, tuning. *Boriskina, S.V.*, +, *J-LT Sep 03* 1987-1995
 LiNbO₃ tunable spectral slicing waveguide filter design, DWDM appls. *Taylor, H.F.*, *J-LT Mar 03* 837-847

logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583

Optical waveguide filters; cf. Optical fiber filters

Optical waveguides

2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690
 Amplitude and phase evol. of opt. fields inside periodic photonic struct. *Fluck, E.*, +, *J-LT May 2003* 1384-1393
 anal. of corrugated long-period gratings in slab waveguides and their polarization dependence. *Liu, Q.*, +, *J-LT Dec 03* 3399-3405
 cylindrical antiresonant reflecting optical waveguide using transfer matrix; design and anal. *Tee, C.W.*, +, *J-LT Dec 03* 3379-3386
 direct UV writing, variable opt. attenuator fabricated. *Svalgaard, M.*, +, *J-LT Sep 03* 2097-2103
 ellipt. whispering-gallery-mode microdisk waveguide filters, tuning. *Boriskina, S.V.*, +, *J-LT Sep 03* 1987-1995
 E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304
 erratum to, "Single-mode condition for silicon rib waveguides" (Oct 02 1851-1855). *Powell, O.*, *J-LT Mar 03* 868
 fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. *Jeehoon Han*, +, *J-LT Jun 03* 1504-1509
 glass photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03* 246-253
 High-isolation photonic microwave mixer/link for wideband sig. proc. and transm. *Yongqiang Shi*, +, *J-LT May 2003* 1224-1232
 LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245
 optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H.*, +, *J-LT Jun 03* 1544-1548
 Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235
 SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836
 SOI submicrometer-size waveguide devices, electrooptic modulation. *Barrios, C.A.*, +, *J-LT Oct 03* 2332-2339
 sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060
 thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R.*, +, *J-LT Aug 03* 1820-1827

Optical waveguides; cf. Optical fibers; Optical planar waveguides; Optical waveguide theory; Waveguide lasers

Optical waveguide theory

2D stratified media, slab waveguide perfectly matched layer modes determ. *Gaal, S.B.*, +, *J-LT Jan 03* 293-298
 3D opt. waveguides, vector modes, modified imaginary dist. BPM. *Chamorro-Posada, P.*, *J-LT Mar 03* 862-867
 anal. of bent opt. waveguides, plane-wave boundary method. *Nesterov, A.*, +, *J-LT Oct 03* 2434-2437
 Channel drop filter using, single defect in 2-D photonic cryst. slab-defect engng. with respect to polariz. mode and ratio of emissions from upper and lower sides. *Asano, T.*, +, *J-LT May 2003* 1370-1376
 comput. opt. waveguides, discontinuous refr. index profiles, spectral collocation method, domain decomp., efficient method. *Chia-Chien Huang*, +, *J-LT Oct 03* 2284-2296
 Cross-orthogonality between guided and radiation modes at opt. waveguide discontinuities. *Ramadan, T.A.*, *J-LT May 2003* 1394-1404
 designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi*, +, *J-LT Oct 03* 2314-2321
 erratum to, "Single-mode condition for silicon rib waveguides" (Oct 02 1851-1855). *Powell, O.*, *J-LT Mar 03* 868
 FDTD BPM for TE- and TM-wave anal. *Shibayama, J.*, +, *J-LT Jul 03* 1709-1715
 Fourier domain planar waveguide Cerenkov SHG. *Hoekstra, H.J.W.M.*, +, *J-LT Jan 03* 299-304
 guided opt. wave, Gaussian approx., spot-size conversion. *Hashimoto, T.*, +, *J-LT Oct 03* 2340-2351
 imaging errors of AWG, calc. *Klekamp, A.*, +, *J-LT Sep 03* 1978-1986
 integrated opt. devices, time-domain beam-propag. method. *Bravo-Roger, L.L.*, +, *J-LT Feb 03* 577
 integr. opt. mirrors, planar waveguide technol., anal. and design. *Wiechmann, S.*, +, *J-LT Jun 03* 1584-1591

integr. opt. waveguides, vectorial BEM anal. *Tao Lu, +, J-LT Aug 03 1793-1807*

low-loss coupling, polariz.-insensitive microwaves and single-mode opt. fibers, 2D taper. *Vivien, L., +, J-LT Oct 03 2429-2433*

Normalized approach for designing cylindrical microresonators. *Klunder, D.J.W., +, J-LT May 2003 1405-1410*

paraxial approx. for stable and efficient reflective BPM, preconditioner. *Ning-Ning Feng, +, J-LT Sep 03 1996-2001*

photonic devices by gen. space mapping tech., modeling and simul. *Ning-Ning Feng, +, J-LT Jun 03 1562-1567*

planar waveguides, birefr. control. *Xiuli Zhao, +, J-LT Oct 03 2352-2357*

props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A., +, J-LT Aug 03 1813-1819*

racetrack microring resonator/multimode interf. coupler, static spectral charact. response. *Caruso, L., +, J-LT Jan 03 206-210*

slanted sidewall high index contrast planar silica waveguides, polariz. crosstalk. *Somasiri, N., +, J-LT Jan 03 54-60*

SOI submicrometer-size waveguide devices, electrooptic modulation. *Barrios, C.A., +, J-LT Oct 03 2332-2339*

time-varying medium layered media, Volterra integral eqn. EM field investig. method. *Fedotov, F.V., +, J-LT Jan 03 305-314*

transverse anisotropic media, finite-element vector beam propag. method. *da Silva, J.P., +, J-LT Feb 03 567-576*

Optical waveguide theory; cf. Optical fiber theory

Optical workshop techniques; cf. Optical fabrication

Optics

fiber fuse phenom., single-mode opt. fibers, simul. *Shuto, Y., +, J-LT Nov 03 2511-2517*

Optics; cf. Integrated optics; Nonlinear optics

Optimization; cf. Genetic algorithms; Simulated annealing

Optimization methods

2-sect. DBR laser operating, ITU freqs. only by grating current tuning, design. *Feies, V.I., +, J-LT Jun 03 1524-1530*

ARC design optim., space mapping tech. *Ning-Ning Feng, +, J-LT Jan 03 281-285*

Array interconnection for rearrangeable 2D MEMS opt. switch. *Teck Yoong Chai, +, J-LT May 2003 1134-1140*

Genetic algm.-based methodology for optimizing multiservice convergence in metro WDM network. *Hyo-Sik Yang, +, J-LT May 2003 1114-1133*

grating-assisted codirectional fiber coupler design. *Brenne, J.K., +, J-LT Jan 03 254-263*

Multilayer soln. for path provisioning in new-generation opt./MPLS networks. *Sabella, R., +, J-LT May 2003 1141-1155*

optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H., +, J-LT Jun 03 1544-1548*

opt. props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A., +, J-LT Aug 03 1813-1819*

photonic devices by gen. space mapping tech., modeling and simul. *Ning-Ning Feng, +, J-LT Jun 03 1562-1567*

reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M., +, J-LT Sep 03 2031-2043*

single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V., +, J-LT Jan 03 61-68*

sync. WDM systs., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu, +, J-LT Jan 03 40-53*

Optoelectronic devices

microwave V-I transmission matrix formalism for anal. of photonic ccts.: application to fiber Bragg gratings. *Capmany, J., +, J-LT Dec 03 3125-3134*

optical MEMs and its future trends (special section). *J-LT Mar 03 582-671*

optical MEMs and its future trends (special section intro.). *Lin, L.Y., +, J-LT Mar 03 582-583*

opto-electronic millimeter-wave synth. using optical frequency comb generator, optically injection locked lasers, and uni-traveling-carrier photodiode. *Fukushima, S., +, J-LT Dec 03 3043-3051*

photonic assisted generation of arbitrary mm-wave and microwave EM waveforms via direct space-to-time optical pulse shaping. *McKinney, J.D., +, J-LT Dec 03 3020-3028*

photonic devices by gen. space mapping tech., modeling and simul. *Ning-Ning Feng, +, J-LT Jun 03 1562-1567*

stabilizing optoelectronic microwave oscillator with photonic filters. *Stekalov, D., +, J-LT Dec 03 3052-3061*

Optoelectronic devices; cf. Integrated optoelectronics; Microwave photonics

Organic compounds

photochromic liq.-core fibers, nonlin. input-output characts. *Saito, M., +, J-LT Oct 03 2255-2261*

Oscillators

ultra-wide-band traveling-wave photodetectors for photonic local oscillators. *Stohr, A., +, J-LT Dec 03 3062-3070*

Oscillators; cf. Backward wave oscillators

P**Packaging**

Packaging, fiber Bragg grating with metal coating for athermal design. *Yu-Lung Lo, +, J-LT May 2003 1377-1383*

plastic packaging, low-cost opt. transceiver modules, effective EM shielding. *Tzong-Lin Wu, +, J-LT Jun 03 1536-1543*

single-mode opt. fiber arrays, high-precision charactn. *Bernussi, A.A., +, J-LT Jun 03 1557-1561*

very-high-dens. 60-fiber connectors, design and perform. *Takaya, M., +, J-LT Jun 03 1549-1556*

Packaging; cf. Integrated circuit packaging; Plastic packaging; Semiconductor device packaging

Packet switching

1 × 2 all-opt. packet switch, all-opt. sig. proc. methods. *Dorren, H.J.S., +, J-LT Jan 03 2-12*

all-opt. packet-switched networks, arbitrary topol., self-routing address scheme. *Yuan, X.C., +, J-LT Feb 03 329-339*

all-opt. wavel.-division multiplexed packet nets., collision avoidance. *Elaine Wong, +, J-LT Nov 03 2652-2660*

Cell-sorting device for creating sync. variable-length opt. packet switches. *Lin, P.J., +, J-LT Apr 03 893-903*

composite-packet-switched WDM net., expt. demons. *Boroditsky, M., +, J-LT Aug 03 1717-1722*

efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzw, M., +, J-LT Jun 03 1435-1455*

FLBM-based all-opt. packet switch, exact/approx. anal. modeling. *Singh, Y.N., +, J-LT Mar 03 719-726*

HORNET archit., demons. and syst. anal. *White, I.M., +, J-LT Nov 03 2489-2498*

implement. of label-controlled arrayed waveguide packet router, opt. IM/FSK coding tech. *Vlachos, K., +, J-LT Nov 03 2617-2628*

joint multilayer protection, packet-over-opt. nets., cost effectiveness. *Chunxiao Chigan, +, J-LT Nov 03 2694-2704*

multiwavelength opt. packet-switched network, contention-resoln. schemes. *Shun Yao, +, J-LT Mar 03 672-683*

opt. CDMA random access protocols with/without pretransmission coord. *Shalaby, H.M.H., J-LT Nov 03 2455-2462*

optically assisted Internet routing, arrays of dynamically reconfigurable FBG-based correlators. *Hauer, M.C., +, J-LT Nov 03 2765-2778*

opt. packet switching net., enhanced edge routers, end-to-end contention resoln. schemes. *Fei Xue, +, J-LT Nov 03 2595-2604*

packet-over-WDM nets., data-centric networking, multiwavelength headers/labels. *Skoufis, C., +, J-LT Oct 03 2110-2122*

packet's time-to-live (TTL) field and subsequent dropping of zero-TTL packet, all-opt. decrementing. *McGeehan, J.E., +, J-LT Nov 03 2746-2752*

Performance failure anal. of EDFA cascades in opt. DWDM packet-switched networks. *Araci, I.E., +, J-LT May 2003 1156-1163*

sync./asynchronous all-opt. switching archits., wavelength converter requirement. *Eramo, V., +, J-LT Feb 03 340-355*

ultrafast nonlin. interferometer (UNI)-based digital opt. ccts. and their, packet switching. *Bintjas, C., +, J-LT Nov 03 2629-2637*

ultrafast time-domain technol. and appl., all-opt. sig. proc. *Vlachos, K., +, J-LT Sep 03 1857-1868*

ultra-high-capacity IP routers, opt. switch fabrics. *Gripp, J., +, J-LT Nov 03 2839-2850*

Packet switching; cf. Multiprotocol label switching

Parametric amplifiers; cf. Optical parametric amplifiers

Partial differential equations

anal. of bent opt. waveguides, plane-wave boundary method. *Nesterov, A., +, J-LT Oct 03 2434-2437*

double-clad fiber amps for high-power pulse amplif., dyn. characts. *Yong Wang, +, J-LT Oct 03 2262-2270*

- guided opt. wave, Gaussian approx., spot-size conversion. *Hashimoto, T.*, +, *J-LT Oct 03* 2340-2351
- single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V.*, +, *J-LT Jan 03* 61-68
- Partial differential equations; cf.** Laplace equations
- Pattern recognition; cf.** Image recognition
- Performance evaluation**
- analytical treatment of randomly birefringent periodically spun fibers. *Pizzinat, A.*, +, *J-LT Dec 03* 3355-3363
- performance evaluation of fiber-edge MO probe. *Wakana, S.*, +, *J-LT Dec 03* 3292-3299
- Permittivity**
- time-varying medium layered media, Volterra integral eqn. EM field investig. method. *Fedotov, F.V.*, +, *J-LT Jan 03* 305-314
- Phase locked loops; cf.** Optical phase locked loops
- Phase modulation**
- Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang*, +, *J-LT Apr 03* 953-960
- designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi*, +, *J-LT Oct 03* 2314-2321
- Efficiency improvement of opt. fiber wavelength converter without spectral spread using sync. phase/FM. *Torii, K.*, +, *J-LT Apr 03* 1039-1045
- opt. carrier supply module, flattened opt. multicarrier gener., sinusoidal ampl. and phase hybrid modulation. *Fujiwara, M.*, +, *J-LT Nov 03* 2705-2714
- phase-modulated 40-Gb/s RZ transm., ghost-pulse gener. suppression. *Kanaev, A.V.*, +, *J-LT Jun 03* 1486-1489
- polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. *Bononi, A.*, +, *J-LT Sep 03* 1903-1913
- ratio between phase and group birefringence in optical single-mode fibers. *Legre, M.*, +, *J-LT Dec 03* 3374-3378
- sol-gel waveguide and electrooptic polymer and intens. modulation for all-opt. nets., polariz.-insensitive transit. *Enami, Y.*, +, *J-LT Sep 03* 2053-2060
- Third-order dispersion compensation using, phase modulator. *Hellstrom, E.*, +, *J-LT May 2003* 1188-1197
- Wavelength conversion of SCM sigs. using SOA, theory, expts., and appls. *Capmany, J.*, +, *J-LT Apr 03* 961-972
- WDM analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03* 500-505
- Phase modulation; cf.** Phase shift keying
- Phase noise**
- WDM direct-detect. DPSK systs., cross-PM-induced nonlin. phase noise. *Hoon Kim, J-LT Aug 03* 1770-1774
- Phase shifters**
- phase-shifting VOA with polymer dispersed liquid crystal. *Chanclou, P.*, +, *J-LT Dec 03* 3471-3476
- single-chip integrated EO polymer photonic RF phase shifter array. *Han, J.*, +, *J-LT Dec 03* 3257-3261
- Phase shift keying**
- Design and perform. of bidirectional opt. SSB modulator. *Loayssa, A.*, +, *J-LT Apr 03* 1071-1082
- digital-microwave link, opt. generated elec.-modulation formats. *Candelas, P.*, +, *J-LT Feb 03* 496-499
- Phase shift keying; cf.** Differential phase shift keying; Quadrature phase shift keying
- Phonons**
- As-Se IR-transmitting glass fiber opt. loss, heating effects. *Nguyen, V.Q.*, +, *J-LT Jan 03* 122-126
- Phosphorus compounds**
- 10-W Raman fiber lasers, 1248 nm, phosphosilicate fibers. *Xiong, Z.*, +, *J-LT Oct 03* 2377-2381
- Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *JLT May 2003* 1339-1349
- Photochromism**
- photochromic liq.-core fibers, nonlin. input-output characts. *Saito, M.*, +, *J-LT Oct 03* 2255-2261
- Photoconducting devices; cf.** Photodiodes; Phototransistors
- Photoconductive cells**
- application of ultrafast photonic technique to study polarization switching dynamics of thin-film ferroelectric capacitors. *Li, J.*, +, *J-LT Dec 03* 3282-3291
- Photodetectors**
- BW cancellation in distributed traveling-wave photodetectors. *Murthy, S.*, +, *J-LT Dec 03* 3071-3077
- dual Mach-Zehnder modulator opt. transmitters, high-speed data, pulse-carver alignment. *Sinsky, J.H.*, *J-LT Feb 03* 412-423
- fiber arrays, liq.-cryst. polariz. stabilizers. *Hirabayashi, K.*, +, *J-LT Oct 03* 2162-2171
- reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M.*, +, *J-LT Sep 03* 2031-2043
- substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytsis, E.N.*, +, *J-LT Oct 03* 2382-2394
- telecomm. lasers, wavel. stabilizer. *Colace, L.*, +, *J-LT Aug 03* 1749-1757
- ultra-wide-band traveling-wave photodetectors for photonic local oscillators. *Stohr, A.*, +, *J-LT Dec 03* 3062-3070
- Photodiodes**
- 120-GHz wireless link, photonic techs. for gener., modulation, emission of mm-wave sigs. *Hirata, A.*, +, *J-LT Oct 03* 2145-2153
- dual Mach-Zehnder modulator opt. transmitters, high-speed data, pulse-carver alignment. *Sinsky, J.H.*, *J-LT Feb 03* 412-423
- opto-electronic millimeter-wave synth. using optical frequency comb generator, optically injection locked lasers, and uni-traveling-carrier photodiode. *Fukushima, S.*, +, *J-LT Dec 03* 3043-3051
- Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820
- Photodiodes; cf.** Avalanche photodiodes; p-i-n photodiodes
- Photoelasticity**
- Characterization of stress-applied polariz.-maintaining (PM) fiber through photoelastic tomography. *Yongwoo Park*, +, *J-LT Apr 03* 997-1004
- Photoelectric cells; cf.** Photoconductive cells
- Photoelectric devices; cf.** Photodetectors
- Photoexcitation; cf.** Optical pumping
- Photolithography**
- 3D microoptical bench by bulk micromachining, opt. scanner. *Sasaki, M.*, +, *J-LT Mar 03* 602-608
- hybrid glasses for microoptics, photolithographic proc. *Karkkainen, A.H.O.*, +, *J-LT Mar 03* 614-623
- Photonic switching systems**
- bidirectional path switched ring networks for photonic IP networks. *Hayashi, M.*, +, *J-LT Feb 03* 356-364
- cct., burst, packet switchings, versatile opt. code-based MPLS. *Kitayama, K.-I.*, +, *J-LT Nov 03* 2753-2764
- create bandwidth-abundant IP nets., photonic MPLS router. *Watanabe, A.*, +, *J-LT Nov 03* 2851-2862
- efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzw, M.*, +, *J-LT Jun 03* 1435-1455
- FLBM-based all-opt. packet switch, exact/approx. anal. modeling. *Singh, Y.N.*, +, *J-LT Mar 03* 719-726
- low-dens. WDM line systs. for long-haul nets., merits. *Gerstel, O.*, +, *J-LT Nov 03* 2470-2475
- MEMS-based opt. cross-connect, time-multiplexed sigs., parallel sig. anal./switch optimiz. *Pau, S.*, +, *J-LT Mar 03* 609-613
- microwave photonics (special section). *J-LT Dec 03* 2959-3299
- microwave photonics (special section intro.). *Seeds, A.J.*, +, *J-LT Dec 03* 2959-2961
- multiwavelength opt. packet-switched network, contention-resoln. schemes. *Shun Yao*, +, *J-LT Mar 03* 672-683
- opt. nets., waveband grooming and IP aggregation. *Parthiban, R.*, +, *J-LT Nov 03* 2476-2488
- opt. reconfigurability and restoration, integr. opt. cross-connects, realizing advantages. *Strand, J.*, +, *J-LT Nov 03* 2871-2882
- packet-switched networks, arbitrary topol., self-routing address scheme. *Yuan, X.C.*, +, *J-LT Feb 03* 329-339
- photonic A/D conversion using low-temperature-grown GaAs MSM switches integrated with Si-CMOS. *Urata, R.*, +, *J-LT Dec 03* 3104-3115
- regenerative all-opt. wavel. converter, transparent demons., 42 nodes and 16800 km, nonblocking all-opt. cross connect. *Leuthold, J.*, +, *J-LT Nov 03* 2863-2870
- sync./asynchronous all-opt. switching archits., wavelength converter requirement. *Eramo, V.*, +, *J-LT Feb 03* 340-355
- transparent ultra-long-haul DWDM nets., broadcast-and-select OADM/OXC archit. *Vasilyev, M.*, +, *J-LT Nov 03* 2661-2672
- two-axis beam-steering micromirrors for large opt. cross-connects. *Aksyuk, V.A.*, +, *J-LT Mar 03* 634-642

- ultra-high-capacity IP routers, opt. switch fabrics. *Gripp, J.*, +, *J-LT Nov 03* 2839-2850
- versatile holographic liq.-cryst. wavel.-selective opt. switch, design and perform. *Fracasso, B.*, +, *J-LT Oct 03* 2405-2411
- wavelength-flexible network nodes, MEMS-based OXCs and wavelength conversion. *Nuzman, C.*, +, *J-LT Mar 03* 648-663
- Photons**
coherence of pulsed microwave signals carried by two-frequency solid state lasers. *Lai, N.D.*, +, *J-LT Dec 03* 3037-3042
- Photorefractive effect**
microwave photonic photorefractive smart filters. *Vourc'h, E.*, +, *J-LT Dec 03* 3135-3143
- Photorefractive materials**
LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245
- materials, nonlin. photosensitive response, grating writing model. *Besley, J.A.*, +, *J-LT Oct 03* 2421-2428
- Phototransistors**
Nonlinearity anal. and optim. of HBTs for opt. mixer designs. *Langlois, P.J.*, +, *J-LT May 2003* 1350-1357
- Piecewise linear techniques**
syst.-level modeling and simulation of 10G optoelectronic interconnect. *Kahrs, M.*, +, *J-LT Dec 03* 3244-3256
- Piezoelectric effects**
Characterization of stress-applied polariz.-maintaining (PM) fiber through photoelastic tomography. *Yongwoo Park*, +, *J-LT Apr 03* 997-1004
- p-i-n diodes**
Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098
- p-i-n diodes; cf.** p-i-n photodiodes
- p-i-n photodiodes**
crit. slowing down, bistable S-SEED. *Clare, B.A.*, +, *J-LT Nov 03* 2883-2890
- reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M.*, +, *J-LT Sep 03* 2031-2043
- Planar waveguides**
planar reflection grating wavelength filters in Si. *Luff, B.J.*, +, *J-LT Dec 03*
- Planar waveguides; cf.** Optical planar waveguides
- Plasma CVD**
SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836
- Plasma deposition; cf.** Plasma CVD
- Plastic films**
moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. *Mrotek, J.L.*, +, *J-LT Aug 03* 1775-1778
- substr.-embedded/flip-chip-bonded photodetector polymer-based opt. interconnects. *Glytis, E.N.*, +, *J-LT Oct 03* 2382-2394
- Plastic packaging**
Fiber-pigtail-detachable plastic MiniDIL transmitter module with, tool-free opt. connector. *Tatsuno, K.*, +, *J-LT Apr 03* 1066-1070
- Pockels effect**
digital and analog appls., opt. intens. modulators. *Li, G.L.*, +, *J-LT Sep 03* 2010-2030
- E-O polymer mode converter, bottom transverse poling electrodes. *Shug-June Hwang*, +, *J-LT Oct 03* 2297-2304
- Optical elec.-power sens. by use of one BGO cryst. *Changsheng Li*, +, *J-LT May 2003* 1328-1333
- Polarimetry**
feed-forward continuous and complete polariz. control, PLZT rotatable-variable waveplate and inline polarimeter. *Hirabayashi, K.*, +, *J-LT Sep 03* 1920-1932
- polariz. changes, Classification and meas., State. *Leo, P.J.*, +, *J-LT Oct 03* 2189-2193
- Real-time first- and second-order PMD charactn. using av. state-of-polariz. of filtered sig. and polariz. scrambling. *Phua, P.B.*, +, *J-LT Apr 03* 982-989
- Polarization**
analytical treatment of randomly birefringent periodically spun fibers. *Pizzinat, A.*, +, *J-LT Dec 03* 3355-3363
- compact optical polarizer incorporating layered waveguide core structure. *Rajarajan, M.*, +, *J-LT Dec 03* 3463-3470
- Polarization; cf.** Dielectric polarization
- Pollution; cf.** Water pollution
- Polluti on measurement**
Monitoring technol. of salinity in water with opt. fiber sens. *Yong Zhao*, +, *J-LT May 2003* 1334-1338
- Polymer dispersed liquid crystals**
phase-shifting VOA with polymer dispersed liquid crystal. *Chanclou, P.*, +, *J-LT Dec 03* 3471-3476
- Polymers; cf.** Optical polymers
- Position control**
out-of-plane fiber-laser alignment, presence of init. nonplanar misalignments, intell. automation method. *Mondal, S.K.*, +, *J-LT Sep 03* 2061-2066
- Power control**
multimedia networks, opt. CDMA with time hopping/power control. *Yashima, H.*, +, *J-LT Mar 03* 695-702
- Power measurement**
Optical elec.-power sens. by use of one BGO cryst. *Changsheng Li*, +, *J-LT May 2003* 1328-1333
- Printed circuits**
10- μ m-thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi*, +, *J-LT Jun 03* 1531-1535
- interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280
- Probability**
arbitrary opt. filtered opt. preamplified sys., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95
- buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. *Allen, C.T.*, +, *J-LT Jan 03* 79-86
- Jones matrix anal. models applied, opt. syst., by high-order PMD, comp. *Orlandini, A.*, +, *J-LT Jun 03* 1456-1464
- survivable multicast sessions against single link failures, opt. WDM mesh nets, provisioning. *Singhal, N.K.*, +, *J-LT Nov 03* 2587-2594
- WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485
- Propagation**
anal. of bent opt. waveguides, plane-wave boundary method. *Nesterov, A.*, +, *J-LT Oct 03* 2434-2437
- Protocols; cf.** Access protocols; Multiprotocol label switching; Transport protocols
- Pulse circuits; cf.** Driver circuits; Logic circuits
- Pulse compression; cf.** Chirp modulation; Optical pulse compression
- Pulsed laser deposition**
optical down-sampling of wide-band microwave signals. *Juodawlkis, P.W.*, +, *J-LT Dec 03* 3116-3124
- Pulse position modulation**
embedded transm. scheme, PPM signaling, symmetric error-correcting codes for opt. CDMA. *Kamakura, K.*, +, *J-LT Jul 03* 1601-1611
- free space opt. PPM CDMA sys., *Ohtsuki, T.*, *J-LT Feb 03* 406-411
- Pulse shaping**
photonically assisted generation of arbitrary mm-wave and microwave EM waveforms via direct space-to-time optical pulse shaping. *McKinney, J.D.*, +, *J-LT Dec 03* 3020-3028
- Pulse time modulation; cf.** Pulse position modulation

Q

Q factor

- arbitrary opt. filtered opt. preamplified sys., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95
- asynchronous amplit. histogram eval. of NRZ sig., chromatic dispers. depend. *Shake, I.*, +, *J-LT Oct 03* 2154-2161
- dispersion-managed soliton syst. perform., span length random vars. *Chongjin Xie*, +, *J-LT Mar 03* 769-775
- high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03* 750-758
- Investigation of syst. upgradability over installed fiber-optic cable using 40-Gb/s WDM sigs. toward multiterabit opt. networks. *Otani, T.*, +, *J-LT Apr 03* 947-952
- pump-modulated FWM scheme, dispers.-shifted fibers, regenerative props. *Bogris, A.*, +, *J-LT Sep 03* 1892-1902
- Quadrature amplitude modulation**
digital-microwave link, opt. generated elec.-modulation formats. *Candelas, P.*, +, *J-LT Feb 03* 496-499

DWDM/SCM self-healing archit. for broad-band subscriber networks. *Wen-Piao Lin*, +, *J-LT Feb 03* 319-328

Quadrature phase shift keying

coded PSK for fiber-optic commun., spectral effic. *Kramer, G.*, +, *J-LT Oct 03* 2438-2445

Quantum theory

single-channel periodically stationary dispersion-managed soliton fiber syst., split-step Fourier method optimization. *Sinkin, O.V.*, +, *J-LT Jan 03* 61-68

Quantum well devices; cf. Quantum well lasers

Quantum well lasers

Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031
Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019
graded SCH VCSELs, reson.-wavelength control/opt-confine. anal. *Wei-Choon Ng*, +, *J-LT Feb 03* 555-560

WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485

Queuing analysis

FLBM-based all-opt. packet switch, exact/approx. anal. modeling. *Singh, Y.N.*, +, *J-LT Mar 03* 719-726

R

Radar; cf. Spread spectrum radar

Radiation effects

cylindrical antiresonant reflecting optical waveguide using transfer matrix; design and anal. *Tee, C.W.*, +, *J-LT Dec 03* 3379-3386

Radio applications; cf. Radiocommunication

Radiocommunication

direct optical switching CDMA syst. for FO radio highway networks. *Tsakamoto, K.*, +, *J-LT Dec 03* 3209-3220

Radiocommunication; cf. Frequency hop communication

Radio equipment; cf. Transceivers

Radiofrequency filters; cf. Millimeter wave filters

Radiofrequency interference; cf. White noise

Radiofrequency oscillators; cf. Microwave oscillators

Raman lasers

10-W Raman fiber lasers, 1248 nm, phosphosilicate fibers. *Xiong, Z.*, +, *J-LT Oct 03* 2377-2381

8 × 10-Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03* 1499-1503

amplif. props., triangular photonic cryst. fibers. *Fuochi, M.*, +, *J-LT Oct 03* 2247-2254

dispers. compensating Raman amps., pump reflectors for increased effic. *Nicholson, J.W.*, *J-LT Aug 03* 1758-1762

Distributed fiber Raman amps. with localized loss. *Seung Kwan Kim*, +, *J-LT May 2003* 1286-1293

DPSK and OOK WDM transm., transoceanic dists. and their perform. degradations, nonlin. phase noise, comparative study. *Mizuochi, T.*, +, *J-LT Sep 03* 1933-1943

dual-order Raman fiber amps., RIN transfer meas. and modeling. *Mermelstein, M.D.*, +, *J-LT Jun 03* 1518-1523

Four-wave mixing between pump and sig. in distributed Raman amp. *Tsu-Te Kung*, +, *J-LT May 2003* 1164-1170

gain coeff., scaling. *Rottwitz, K.*, +, *J-LT Jul 03* 1652-1662

GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S.*, +, *J-LT Jan 03* 170-175

Impact of dispersion fluct. on 40-Gb/s dispersion-managed lightwave systs. *Poutrina, E.*, +, *J-LT Apr 03* 990-996

lumped and distrib. Raman amps., double Rayleigh scatt. noise. *Parolari, P.*, +, *J-LT Oct 03* 2224-2228

reducing pump-sig. FWM interact., copumped distrib. Raman amps., Raman pump module. *Di Pasquale, F.*, +, *J-LT Aug 03* 1742-1748

stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202

Super-DWDM transm. technol. in zero-dispersion region employing distributed Raman amplif. *Suzuki, H.*, +, *J-LT Apr 03* 973-981

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

wide geographical opt. fiber transport networks, Gb/s transm. *Matera, F.*, +, *J-LT Feb 03* 456-465

Raman scattering

10-W Raman fiber lasers, 1248 nm, phosphosilicate fibers. *Xiong, Z.*, +, *J-LT Oct 03* 2377-2381

amps., noise. *Yamamoto, Y.*, +, *J-LT Nov 03* 2895-2915

Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. systs. *Zhi Jiang*, +, *J-LT Apr 03* 953-960

crosstalk, dispers.-managed fiber links, stat. anal. *Yamamoto, T.*, +, *J-LT Oct 03* 2229-2239

gain coeff., scaling. *Rottwitz, K.*, +, *J-LT Jul 03* 1652-1662

lumped and distrib. Raman amps., double Rayleigh scatt. noise. *Parolari, P.*, +, *J-LT Oct 03* 2224-2228

Raman amplif. props., triangular photonic cryst. fibers. *Fuochi, M.*, +, *J-LT Oct 03* 2247-2254

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

WDM analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03* 500-505

Raman spectra

pump-wavelength dependence of Raman gain in single-mode optical fibers. *Newbury, N.R.*, *J-LT Dec 03* 3364-3373

Raman spectra; cf. Stimulated Raman scattering

Randomized algorithms; cf. Genetic algorithms

Random noise; cf. Gaussian noise; Shot noise; White noise

Rare earth compounds; cf. Lanthanum compounds

Rare earth metals; cf. Erbium; Neodymium; Thulium; Ytterbium

Rayleigh scattering

dispers. compensating Raman amps., pump reflectors for increased effic. *Nicholson, J.W.*, *J-LT Aug 03* 1758-1762

Estimation of perform. degrad. of bidirectional WDM transm. systs. due to Rayleigh backscatt. and ASE noises using num. and anal. models. *Jeongyun Ko*, +, *J-LT Apr 03* 938-946

lumped and distrib. Raman amps., double Rayleigh scatt. noise. *Parolari, P.*, +, *J-LT Oct 03* 2224-2228

polariz. depend. of OLCR, act. Faraday rotator. *Takada, K.*, *J-LT Nov 03* 2916-2922

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

Reactors (electric); cf. Inductors

Real-time systems

real-time detection of femtosecond optical pulse sequences via time-to-space conversion in lightwave communications band. *Chung, J.-H.*, +, *J-LT Dec 03* 3323-3333

Receivers; cf. Optical receivers; Transceivers

Rectangular waveguides

rectangular waveguide output uni-traveling-carrier photodiode module for high-power photonic F-band mm-wave generation. *Ito, H.*, +, *J-LT Dec 03* 3456-3462

Rectangular waveguides; cf. Ridge waveguides

Redundancy

opt. bidirectional path switched ring networks for photonic IP networks. *Hayashi, M.*, +, *J-LT Feb 03* 356-364

Reed-Solomon codes

coded PSK for fiber-optic commun., spectral effic. *Kramer, G.*, +, *J-LT Oct 03* 2438-2445

Reflectivity

distortion in angle-modulated links induced by ripple in fiber-Bragg grating reflectance and delay characteristics. *Ulmer, T.G.*, *J-LT Dec 03* 3226-3236

Reflectometry

Enhancement of MUX capability of low-coherence interferometric fiber sens. array by use of loop topol. *Libo Yuan*, +, *J-LT May 2003* 1313-1319

Theoretical anal. of reflectometric meas. in opt. fiber links affected by polariz.-depend. loss. *Galtarossa, A.*, +, *J-LT May 2003* 1233-1241

Reliability

distributed fiber Bragg grating sens., arrayed waveguide grating fast opt. wavelength interrogator. *Sano, Y.*, +, *J-LT Jan 03* 132-139

Reliability; cf. Laser reliability; Semiconductor device reliability

Repeaters; cf. Optical repeaters

Resists

surface micromachined opt. scanner array, photoresist lenses fabricated by thermal reflow proc. *Toshiyoshi, H.*, +, *J-LT Jul 03* 1700-1708

Resonators; cf. Micromechanical resonators; Optical resonators

Reviews; cf. Bibliographies

Rib waveguides

2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690

erratum to, "Single-mode condition for silicon rib waveguides" (Oct 02 1851-1855). *Powell, O.*, *J-LT Mar 03* 868

optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H.*, +, *J-LT Jun 03* 1544-1548

Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235

Ridge waveguides

2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690

Amplitude and phase evol. of opt. fields inside periodic photonic struct. *Fluck, E.*, +, *J-LT May 2003* 1384-1393

fiber chromatic dispers. effects, fiber-wireless and photonic time-stretching syst., polymer modulators, reduction. *Jeehoon Han*, +, *J-LT Jun 03* 1504-1509

thin-film PLZT waveguide, ridge-type Mach-Zehnder modulator, electrooptic characts. *Thapliya, R.*, +, *J-LT Aug 03* 1820-1827

Ring lasers

Brillouin fiber-ring laser, DFB LD pumped. *Jae Chul Yong*, +, *J-LT Feb 03* 546-554

Smoothly wavelength-tunable picosecond pulse generation using, harmonically mode-locked fiber ring laser. *Lingze Duan*, +, *J-LT Apr 03* 930-937

widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634

S

Sampling methods; cf. Signal sampling

Sapphire

high-temp. appls., single-cryst. sapphire fiber-based strain sens. *Hai Xiao*, +, *J-LT Oct 03* 2276-2283

Scanning probe microscopy; cf. Atomic force microscopy

Sea measurements

Monitoring technol. of salinity in water with opt. fiber sens. *Yong Zhao*, +, *J-LT May 2003* 1334-1338

Search methods

WDM networks, wavelength converter placement, optim. model. *Suixiang Gao*, +, *J-LT Mar 03* 684-694

Security of data; cf. Cryptography

Self-electrooptic-effect devices

crit. slowing down, bistable S-SEED. *Clare, B.A.*, +, *J-LT Nov 03* 2883-2890

Semiconductor device modeling

2-sect. DBR laser operating, ITU freqs. only by grating current tuning, design. *Feies, V.I.*, +, *J-LT Jun 03* 1524-1530

InGaAsP-InP 1.55- μ m lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M.*, +, *J-LT Jan 03* 269-274

Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098

Modeling and simul. of next-generation multimode fiber links. *Pepeljugoski, P.*, +, *J-LT May 2003* 1242-1255

opt. amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919

SOI submicrometer-size waveguide devices, electrooptic modulation. *Barrios, C.A.*, +, *J-LT Oct 03* 2332-2339

WDM by increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485

Semiconductor device noise

cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197

high-output-power polariz.-insensitive SOA, WDM syst. switching elements. *Morito, K.*, +, *J-LT Jan 03* 176-181

opt. amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919

Semiconductor device packaging

10- μ m-thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi*, +, *J-LT Jun 03* 1531-1535

Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019

high-speed directly modulated Fabry-Perot/DFB spot-size-converted lasers, uncooled telecomm. environ. *Klotzkin, D.*, +, *J-LT Jan 03* 69-78

low-loss waveguide-fiber coupling, CBE shadow-masked growth. *Balmer, R.S.*, +, *J-LT Jan 03* 211-217

Semiconductor device reliability

Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019

Semiconductor devices; cf. Semiconductor lasers

Semiconductor device testing

Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009

Semiconductor diodes; cf. Photodiodes; p-i-n diodes

Semiconductor heterojunctions

rectangular waveguide output uni-traveling-carrier photodiode module for high-power photonic F-band mm-wave generation. *Ito, H.*, +, *J-LT Dec 03* 3456-3462

Semiconductor-insulator boundaries; cf. Silicon-on-insulator

Semiconductor junctions; cf. Semiconductor heterojunctions

Semiconductor laser arrays

10- μ m-thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi*, +, *J-LT Jun 03* 1531-1535

interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280

Semiconductor lasers

2-sect. DBR laser operating, ITU freqs. only by grating current tuning, design. *Feies, V.I.*, +, *J-LT Jun 03* 1524-1530

crosstalk, noise, and stability anal. of DWDM channels generated by injection locking techniques. *Cai, B.*, +, *J-LT Dec 03* 3029-3036

Development of syst. spec. for laser-optimized 50- μ m multimode fiber for multigigabit SW LANs. *Pepeljugoski, P.*, +, *J-LT May 2003* 1256-1275

direct-detect. transm. syst. perform., laser noise influence. *Morgado, J.A.P.*, +, *J-LT Mar 03* 759-768

Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009

high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03* 750-758

high-speed directly modulated Fabry-Perot/DFB spot-size-converted lasers, uncooled telecomm. environ. *Klotzkin, D.*, +, *J-LT Jan 03* 69-78

InGaAsP-InP 1.55- μ m lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M.*, +, *J-LT Jan 03* 269-274

Modeling and simul. of next-generation multimode fiber links. *Pepeljugoski, P.*, +, *J-LT May 2003* 1242-1255

Si planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820

Super-DWDM transm. technol. in zero-dispersion region employing distributed Raman amplif. *Suzuki, H.*, +, *J-LT Apr 03* 973-981

telecomm. lasers, wavel. stabilizer. *Colace, L.*, +, *J-LT Aug 03* 1749-1757

wedge-shaped lensed fibers for fiber-laser coupling, design optim. *Yongzhi He*, +, *J-LT Oct 03* 2271-2275

Semiconductor lasers; cf. Quantum well lasers; Semiconductor laser arrays; Semiconductor optical amplifiers

Semiconductor optical amplifiers

optical subcarrier label swapping by semiconductor optical amplifiers. *Udvary, E.*, +, *J-LT Dec 03* 3221-3225

Semiconductor plasmas

2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690

Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235

Semiconductors

lightwave switching in semiconductor microring devices by free carrier injection. *Ibrahim, T.A.*, +, *J-LT Dec 03* 2997-3003

Semiconductor technology; cf. Semiconductor device packaging

Sensitivity

8 $\times$ 10-Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03* 1499-1503

- arbitrary opt. filtered opt. preamplified systs., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95
- burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575
- cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197
- germano-silica planar waveguides, 157-nm F₂ laser radiation photosensitivity. *Chen, K.P.*, +, *J-LT Jan 03* 140-148
- high-output-power polariz.-insensitive SOA, WDM syst. switching elements. *Morito, K.*, +, *J-LT Jan 03* 176-181
- long period fiber gratings fab., refr. index/temp. sens. appls. *Allsop, T.*, +, *J-LT Jan 03* 264-268
- long-period gratings, fiber cladding mode sensitivity charactn. *Besley, J.A.*, +, *J-LT Mar 03* 848-853
- Monitoring opt. network perform. degrad. due to amp. noise. *Kilper, D.C.*, +, *J-LT May 2003* 1171-1178
- Propagation charact. of single-polariz. opt. fiber with, ellipt. core and triple-clad. *Furukawa, S.*, +, *J-LT May 2003* 1307-1312
- SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836
- std. fibers, DUV laser radiation, photosensitization. *Chen, K.P.*, +, *J-LT Sep 03* 1958-1968
- Sensors; cf.** Intelligent sensors; Microsensors; Photodetectors
- Series (mathematics); cf.** Volterra series
- Shielding; cf.** Electromagnetic shielding
- Shot noise**
- cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197
- opt. CDMA random access protocols with/without pretransmission coord. *Shalaby, H.M.H.*, *J-LT Nov 03* 2455-2462
- wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03* 1612-1620
- Signal detection; cf.** Heterodyne detection; Optical signal detection
- Signal flow graphs**
- nets., shared risk link groups, trap avoidance and protection schemes. *Dahai Xu*, +, *J-LT Nov 03* 2683-2693
- Signal generators; cf.** Function generators
- Signal processing**
- High-isolation photonic microwave mixer/link for wideband sig. proc. and transm. *Yongqiang Shi*, +, *J-LT May 2003* 1224-1232
- high-resolution photonics-based interference suppression filter with wide passband. *Chan, E.H.W.*, +, *J-LT Dec 03* 3144-3149
- RF photonics signal processing in subcarrier multiplexed optical-label switching communication systs. *Zhu, Z.*, +, *J-LT Dec 03* 3155-3166
- Signal processing; cf.** Array signal processing; Image processing; Optical information processing; Signal sampling
- Signal representations**
- opt. pulses-fiber gratings interact. by of joint time-freq. sig. representations. *Azana, J.*, +, *J-LT Nov 03* 2931-2941
- Signal sampling**
- asynchronous amplit. histogram eval. of NRZ sig., chromatic dispers. depend. *Shake, I.*, +, *J-LT Oct 03* 2154-2161
- optical down-sampling of wide-band microwave signals. *Juodawlkis, P.W.*, +, *J-LT Dec 03* 3116-3124
- Signal sampling/reconstruction**
- in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. *Zalevsky, Z.*, +, *J-LT Nov 03* 2734-2738
- Silicon**
- Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098
- planar lightwave cct. chip, hybrid microlaser encoder. *Sawada, R.*, +, *J-LT Mar 03* 815-820
- Si-based light modulator design/testing/fab. *Sciuto, A.*, +, *J-LT Jan 03* 228-235
- Silicon compounds**
- Experimental and num. study of SiON microresonators with air and polymer cladding. *Klunder, D.J.W.*, +, *J-LT Apr 03* 1099-1110
- SiO₂-based UV-induced Bragg grating waveguide athermalization. *Kintaka, K.*, +, *J-LT Mar 03* 831-836
- Silicon-on-insulator**
- erratum to, "Single-mode condition for silicon rib waveguides" (Oct 02 1851-1855). *Powell, O.*, *J-LT Mar 03* 868
- planar reflection grating wavelength filters in Si. *Luff, B.J.*, +, *J-LT Dec 03*
- Silicon on insulator technology**
- low-loss coupling, polariz.-insensitive microwaves and single-mode opt. fibers, 2D taper. *Vivien, L.*, +, *J-LT Oct 03* 2429-2433
- Low-power-consumption short-length and high-modulation-depth silicon electrooptic modulator. *Barrios, C.A.*, +, *J-LT Apr 03* 1089-1098
- submicrometer-size waveguide devices, electrooptic modulation. *Barrios, C.A.*, +, *J-LT Oct 03* 2332-2339
- Simulated annealing**
- high-channel-count chromatic dispers. compensation, phased-only sampled fiber Bragg gratings. *Hongpu Li*, +, *J-LT Sep 03* 2074-2083
- Simulation**
- multisectional modeling of high-speed EO modulators integrated in microwave cct. CAD environment. *Pirola, M.*, +, *J-LT Dec 03* 2989-2996
- Soldering**
- Fiber-pigtail-detachable plastic MiniDIL transmitter module with, tool-free opt. connector. *Tatsuno, K.*, +, *J-LT Apr 03* 1066-1070
- Solid lasers**
- coherence of pulsed microwave signals carried by two-frequency solid state lasers. *Lai, N.D.*, +, *J-LT Dec 03* 3037-3042
- noise suppression of Nd:YVO₄ solid-state lasers for telecommunication applications. *Csornyei, M.*, +, *J-LT Dec 03* 2983-2988
- opt. amps., index contrast scaling. *Saini, S.*, +, *J-LT Oct 03* 2368-2376
- Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349
- Solid lasers; cf.** Fiber lasers; Semiconductor lasers
- Solitons; cf.** Optical solitons
- SONET**
- efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzw, M.*, +, *J-LT Jun 03* 1435-1455
- Fiber-pigtail-detachable plastic MiniDIL transmitter module with, tool-free opt. connector. *Tatsuno, K.*, +, *J-LT Apr 03* 1066-1070
- opt. transm. systs., constraint-based design. *Alicherry, M.*, +, *J-LT Nov 03* 2499-2510
- Spatial light modulators**
- dyn. spectral equalizer, free-space dispers. optics combined, PDLC spatial light attenuator. *Loukina, T.*, +, *J-LT Sep 03* 2067-2073
- versatile holographic liq.-cryst. wavel.-selective opt. switch, design and perform. *Fracasso, B.*, +, *J-LT Oct 03* 2405-2411
- Spatial variables control; cf.** Position control
- Spatial variables measurement; cf.** Displacement measurement; Distance measurement
- Special issues and sections**
- microwave photonics (special section). *J-LT Dec 03* 2959-3299
- microwave photonics (special section intro.). *Seeds, A.J.*, +, *J-LT Dec 03* 2959-2961
- optical MEMs and its future trends (special section). *J-LT Mar 03* 582-671
- optical MEMs and its future trends (special section intro.). *Lin, L.Y.*, +, *J-LT Mar 03* 582-583
- optical networks (special issue). *J-LT Nov 03* 2452-2952
- optical net works (special issue intro.). *Jinno, M.*, +, *J-LT Nov 03* 2452-2454
- Spectra; cf.** Optical hole burning; Raman spectra; Rayleigh scattering
- Spectral analysis**
- cladding-mode waveguide dispers. and effects, spectra of long-period fiber grating, theor. anal. *Jeong, H.*, +, *J-LT Aug 03* 1838-1845
- high-speed electrooptic modulator charactn., opt. spectrum anal. *Yongqiang Shi*, +, *J-LT Oct 03* 2358-2367
- Spectroscopy; cf.** Infrared spectroscopy
- SPICE**
- Nonlinearity anal. and optim. of HBTs for opt. mixer designs. *Langlois, P.J.*, +, *J-LT May 2003* 1350-1357
- reson. cavity enhanced p-i-n photodetector, anal., optim., SPICE modeling. *El-Batawy, Y.M.*, +, *J-LT Sep 03* 2031-2043
- Spontaneous emission**
- amps., noise. *Yamamoto, Y.*, +, *J-LT Nov 03* 2895-2915
- arbitrary opt. filtered opt. preamplified systs., Q-factor estim. *Rebola, J.L.*, +, *J-LT Jan 03* 87-95
- cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03* 182-197
- double-clad fiber amps. for high-power pulse amplif., dyn. characts. *Yong Wang*, +, *J-LT Jan 03* 2262-2270
- in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. *Zalevsky, Z.*, +, *J-LT Nov 03* 2734-2738

- Monitoring opt. network perform. degrad. due to amp. noise. *Kilper, D.C.*, +, *J-LT May 2003* 1171-1178
- opt.-fiber commun., ASE noise dominated, turbo code decoder perform. *Yi Cai*, +, *J-LT Mar 03* 727-734
- wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03* 1612-1620
- WDM direct-detect. DPSK systs., cross-PM-induced nonlin. phase noise. *Hoon Kim*, *J-LT Aug 03* 1770-1774
- widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634
- Spread spectrum radar**
microwave photonic direct-sequence transmitter and heterodyne correlation receiver. *Funk, E.E.*, +, *J-LT Dec 03* 2962-2967
- Sputter etching**
2-mode interf. photonic waveguide switch. *Baojun Li*, +, *J-LT Jul 03* 1685-1690
- EM micromirror array with single-cryst. Si mirror plate and Al spring. *Chang-Hyeon Ji*, +, *J-LT Mar 03* 584-590
- integr. opt. mirrors, planar waveguide technol., anal. and design. *Wiechmann, S.*, +, *J-LT Jun 03* 1584-1591
- Sputtering; cf.** Sputter etching
- Stability**
3rd.-order dispers. and sideband instabil., single-channel opt. fiber transm. by midway opt. phase conjug. employing higher order dispers. mgt. *Kaewplung, P.*, +, *J-LT Jun 03* 1465-1473
- aerial distrib. cable/feeder sects., fiber access networks. *Kawataka, J.*, +, *J-LT Mar 03* 789-796
- crosstalk, noise, and stability anal. of DWDM channels generated by injection locking techniques. *Cai, B.*, +, *J-LT Dec 03* 3029-3036
- distributed fiber Bragg grating sens., arrayed waveguide grating fast opt. wavelength interrogator. *Sano, Y.*, +, *J-LT Jan 03* 132-139
- double-coated opt. fibers design, polymeric coating longterm tensile-force-induced delamination. *Ting-Ying Shen*, +, *J-LT Jan 03* 106-110
- Er-doped superfluorescent fiber source with 0.5-ppm long-term mean wavelength stability. *Park, H.G.*, +, *J-LT Dec 03* 3427-3433
- paraxial approx. for stable and efficient reflective BPM, preconditioner. *Ning-Ning Feng*, +, *J-LT Sep 03* 1996-2001
- prog. group-delay module, binary polariz. switching. *Lianshan Yan*, +, *J-LT Jul 03* 1676-1684
- stabilizing optoelectronic microwave oscillator with photonic filters. *Strelakov, D.*, +, *J-LT Dec 03* 3052-3061
- Stability; cf.** Laser stability
- Standardization**
Measurements for enhanced bandwidth perform. over 62.5- μ m multimode fiber in SW LAN. *Schlager, J.B.*, +, *J-LT May 2003* 1276-1285
- polariz. changes, Classification and meas., State. *Leo, P.J.*, +, *J-LT Oct 03* 2189-2193
- Standards; cf.** Measurement standards
- Statistics**
buried std. single-mode fiber, polariz.-mode dispersion effects, network-level mitigation approaches. *Allen, C.T.*, +, *J-LT Jan 03* 79-86
- Jones matrix anal. models applied, opt. syst., by high-order PMD, comp. *Orlandini, A.*, +, *J-LT Jun 03* 1456-1464
- polariz. changes, Classification and meas., State. *Leo, P.J.*, +, *J-LT Oct 03* 2189-2193
- Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202
- stimulated Raman crosstalk, dispers.-managed fiber links, stat. anal. *Yamamoto, T.*, +, *J-LT Oct 03* 2229-2239
- Statistics; cf.** Error statistics; Monte Carlo methods
- Stimulated Raman scattering**
optimal design for ultra-broad-band amplifier. *Liu, X.*, +, *J-LT Dec 03* 3446-3455
- technique for measuring longitudinal distribution of Raman gain characteristics in optical fibers. *Toge, K.*, +, *J-LT Dec 03* 3349-3354
- Stimulated scattering; cf.** Stimulated Raman scattering
- Stochastic processes**
APD impulse response, ionization PDF. *Tan, C.H.*, +, *J-LT Jan 03* 155-159
- direct-detect. transm. syst. perform., laser noise influence. *Morgado, J.A.P.*, +, *J-LT Mar 03* 759-768
- matched-clad opt. fibers, variational anal. *Chiadini, F.*, +, *J-LT Jan 03* 96-105
- opt. amp., gain clamping by vert. laser field, crosstalk and noise. *Oksanen, J.*, +, *J-LT Sep 03* 1914-1919
- Strain control**
GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
- Strain measurement**
epoxy-cured fiber-optic connectors, strain eval. *Broadwater, K.*, +, *J-LT Jul 03* 1668-1675
- extrinsic Fabry-Perot interferometric opt. fiber sens., strain meas. *Sang-Hoon Kim*, +, *J-LT Mar 03* 797-804
- high-temp. appls., single-cryst. sapphire fiber-based strain sens. *Hai Xiao*, +, *J-LT Oct 03* 2276-2283
- Stress**
Brillouin freq. shift and long. acoustic wave, silica opt. fiber, triple-layered struct. *Jaewang Yu*, +, *J-LT Aug 03* 1779-1786
- opt. planar waveguides, birefr. control. *Xiuli Zhao*, +, *J-LT Oct 03* 2352-2357
- Subcarrier multiplexing**
all-opt. packet switching routers, opt. label swapping and 2R regeneration for scalable opt. label switching net. appls., demons. *Min Yong Jeon*, +, *J-LT Nov 03* 2723-2733
- DWDM/SCM self-healing archit. for broad-band subscriber networks. *Wen-Piao Lin*, +, *J-LT Feb 03* 319-328
- high-efficiency optical-microwave mixing approach. *Jaro, G.*, +, *J-LT Dec 03* 3078-3084
- mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. *Lim, C.*, +, *J-LT Oct 03* 2203-2210
- optical subcarrier label swapping by semiconductor optical amplifiers. *Udvary, E.*, +, *J-LT Dec 03* 3221-3225
- toward Tb/s capacities over multimode fiber links using SCM/WDM techniques. *Tyler, E.J.*, +, *J-LT Dec 03* 3237-3243
- Wavelength conversion of SCM sigs. using SOA, theory, expts., and appls. *Capmany, J.*, +, *J-LT Apr 03* 961-972
- Superradiance**
Er-doped superfluorescent fiber source with 0.5-ppm long-term mean wavelength stability. *Park, H.G.*, +, *J-LT Dec 03* 3427-3433
- Surface-emitting lasers**
10- μ m-thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi*, +, *J-LT Jun 03* 1531-1535
- cct. model for multiple transverse mode vertical-cavity surface emitting lasers. *Marozsak, T.*, *J-LT Dec 03* 2977-2982
- Development of syst. spec. for laser-optimized 50- μ m multimode fiber for multigigabit SW LANs. *Pepeljugin, P.*, +, *J-LT May 2003* 1256-1275
- Fabrication and charact. of high-speed implant-confined index-guided lateral-current 850-nm VCSEL. *Dang, G.T.*, +, *J-LT Apr 03* 1020-1031
- Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019
- GaAlAs-GaAs micromachined vert. cavity filter with thermal strain control. *Amano, T.*, +, *J-LT Mar 03* 596-601
- graded SCH VCSELs, reson.-wavelength control/opt.-confine. anal. *Wei-Choon Ng*, +, *J-LT Feb 03* 555-560
- interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280
- opt. injection, VCSEL polariz. control. *Bandyopadhyay, S.*, +, *J-LT Oct 03* 2395-2404
- Surface mounting**
integrated laser blood flowmeter by micromachining and surface mount techs. *Higurashi, E.*, +, *J-LT Mar 03* 591-595
- interchip opt. interconnections, SMT-compatible opt.-I/O package, microlens array interfaced. *Ishii, Y.*, +, *J-LT Jan 03* 275-280
- Surface treatment; cf.** Etching
- Switches; cf.** Optical switches
- Switching circuits; cf.** Logic circuits
- Synchronization**
fiber-to-the-desk appl., ethernet-based pass. opt. LAN. *Radovanovic, I.*, +, *J-LT Nov 03* 2534-2545
- high-bit-rate opt. chaotic commun., back-to-back config. *Kanakidis, D.*, +, *J-LT Mar 03* 750-758
- simulating polariz. effects, recirculating fiber loops, loop-sync. polariz. scrambling tech. *Yu, Q.*, +, *J-LT Jul 03* 1593-1600
- ultrafast time-domain technol. and appl., all-opt. sig. proc. *Vlachos, K.*, +, *J-LT Sep 03* 1857-1868

Synchronous digital hierarchy

efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzow, M.*, +, *J-LT Jun 03* 1435-1455
 Fiber-pigtail-detachable plastic MiniDIL transmitter module with, tool-free opt. connector. *Tatsuno, K.*, +, *J-LT Apr 03* 1066-1070

T**Technological forecasting**

optical MEMs and its future trends (special section). *J-LT Mar 03* 582-671
 optical MEMs and its future trends (special section intro.). *Lin, L.Y.*, +, *J-LT Mar 03* 582-583

Telecommunication

microwave photonics (special section). *J-LT Dec 03* 2959-3299
 microwave photonics (special section intro.). *Seeds, A.J.*, +, *J-LT Dec 03* 2959-2961

Telecommunication; cf. Bandwidth allocation; Data communication; Mobile communication; Multimedia communication; Optical communication; Radiocommunication; Telecommunication networks

Telecommunication channels; cf. Channel allocation

Telecommunication equipment; cf. Optical communication equipment

Telecommunication links; cf. Optical links

Telecommunication network management; cf. Computer network management

Telecommunication network reliability; cf. Computer network reliability

Telecommunication networks

optical networks (special issue). *J-LT Nov 03* 2452-2952
 optical networks (special issue intro.). *Jinno, M.*, +, *J-LT Nov 03* 2452-2454

Telecommunication networks; cf. Broadband networks

Telecommunication standards; cf. SNET

Telecommunication switching; cf. Demultiplexing; Multiplexing; Photonic switching systems

Tellurium compounds

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

Temperature measurement

Brillouin shift, dispers.-shifted fiber and annealing effect, wide-range temp. depend. *Yongqian Li*, +, *J-LT Jul 03* 1663-1667
 long period fiber gratings fab., refr. index/temp. sens. appls. *Allsop, T.*, +, *J-LT Jan 03* 264-268

Novel fiber-optic sens. based on long-period fiber gratings written by HF CO₂ laser pulses. *Yun-Jiang Rao*, +, *J-LT May 2003* 1320-1327
 three-interface surface plasmon reson. opt. temp. sens. *Ozdemir, S.K.*, +, *J-LT Mar 03* 805-814

Testing

extended optical fiber line testing system using eight-channel L/U-band crossed optical waveguide coupler for L-band WDM transmission. *Araki, N.*, +, *J-LT Dec 03* 3316-3322

rigorous beam propagation anal. of tapered spot-size converters in deep-etched semiconductor waveguides. *Rahman, B.M.A.*, +, *J-LT Dec 03* 3392-3398

technique for measuring longitudinal distribution of Raman gain characteristics in optical fibers. *Toge, K.*, +, *J-LT Dec 03* 3349-3354

Testing; cf. Materials testing

Thermal factors

fiber fuse phenom., single-mode opt. fibers, simul. *Shuto, Y.*, +, *J-LT Nov 03* 2511-2517

Thermal variables measurement; cf. Temperature measurement

Thermo-optic effects

Brillouin shift, dispers.-shifted fiber and annealing effect, wide-range temp. depend. *Yongqian Li*, +, *J-LT Jul 03* 1663-1667

Thermoresistivity

10- μ m-thick VCSEL array, fully embedded board level guided-wave optoelectronic interconnects, perform. anal. *Chulchae Choi*, +, *J-LT Jun 03* 1531-1535

Thulium

widely tunable S-band fiber-ring lasers and broadband ASE sources, Tm-doped fluoride fibers. *Chen, H.*, +, *J-LT Jul 03* 1629-1634

Time division multiplexing

2-stage Sagnac DEMUX. *Parolari, P.*, +, *J-LT Aug 03* 1808-1812

all-opt. TDM data DEMUX, 80 Gb/s, significant timing jitter tolerance, fiber Bragg grating rect. pulse switching technol. *Ju Han Lee*, +, *J-LT Nov 03* 2518-2523

MEMS-based opt. cross-connect, time-multiplexed sigs., parallel sig. anal./switch optimiz. *Pau, S.*, +, *J-LT Mar 03* 609-613

optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H.*, +, *J-LT Jun 03* 1544-1548

Third-order dispersion compensation using, phase modulator. *Hellstrom, E.*, +, *J-LT May 2003* 1188-1197

ultrafast time-domain technol. and appl., all-opt. sig. proc. *Vlachos, K.*, +, *J-LT Sep 03* 1857-1868

wavel. meas. of low-power time-multiplexed sigs., opt. amps., simple and highly sensitive method. *Cooper, D.J.F.*, +, *J-LT Jul 03* 1612-1620

Time division multiplexing; cf. Asynchronous transfer mode; Packet switching; Synchronous digital hierarchy

Time domain analysis

integrated opt. devices, time-domain beam-propag. method. *Bravo-Roger, L.L.*, +, *J-LT Feb 03* 577

Time-domain analysis; cf. Time-frequency analysis

Time-domain synthesis

real-time detection of femtosecond optical pulse sequences via time-to-space conversion in lightwave communications band. *Chung, J.-H.*, +, *J-LT Dec 03* 3323-3333

Time-frequency analysis

opt. pulses-fiber gratings interact. by of joint time-freq. sig. representations. *Azana, J.*, +, *J-LT Nov 03* 2931-2941

Tomography; cf. Optical tomography

Topology; cf. Network topology

Traffic control (communication)

all-opt. wavel.-division multiplexed packet nets., collision avoidance. *Elaine Wong*, +, *J-LT Nov 03* 2652-2660

automatically switched opt. nets., PNNI-based control plane. *Sanchez-Lopez, S.*, +, *J-LT Nov 03* 2673-2682

fiber-to-the-desk appl., ethernet-based pass. opt. LAN. *Radovanovic, I.*, +, *J-LT Nov 03* 2534-2545

nets., shared risk link groups, trap avoidance and protection schemes. *Dahai Xu*, +, *J-LT Nov 03* 2683-2693

opt. nets., waveband grooming and IP aggregation. *Parthiban, R.*, +, *J-LT Nov 03* 2476-2488

Transceivers

Failure mode anal. of oxide VCSELs in high humidity and high temp. *Suning Xie*, +, *J-LT Apr 03* 1013-1019

Measurements for enhanced bandwidth perform. over 62.5- μ m multimode fiber in SW LAN. *Schlager, J.B.*, +, *J-LT May 2003* 1276-1285

multichannel receptacle PLC modules, waveguide-fiber connector. *Asakawa, S.*, +, *J-LT Mar 03* 821-830

Physical/logical topol. design of large-scale opt. networks. *Yufeng Xin*, +, *J-LT Apr 03* 904-915

plastic packaging, low-cost opt. transceiver modules, effective EM shielding. *Tzong-Lin Wu*, +, *J-LT Jun 03* 1536-1543

Transformers

rectangular waveguide output uni-traveling-carrier photodiode module for high-power photonic F-band mm-wave generation. *Ito, H.*, +, *J-LT Dec 03* 3456-3462

Transforms; cf. Hilbert transforms

Transient analysis

burst-mode receivers, avalanche photodiodes, sensitivity penalty calc. *Ossieur, P.*, +, *J-LT Nov 03* 2565-2575

opt. pulses-fiber gratings interact. by of joint time-freq. sig. representations. *Azana, J.*, +, *J-LT Nov 03* 2931-2941

Transient response

APD impulse response, ionization PDF. *Tan, C.H.*, +, *J-LT Jan 03* 155-159

imaging errors of AWG, calc. *Klekamp, A.*, +, *J-LT Sep 03* 1978-1986
 logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583

Transistors; cf. Phototransistors

Transmitters; cf. Optical transmitters; Transceivers

Transport protocols

customer-controlled and -managed opt. net s. *St Arnaud, B.*, +, *J-LT Nov 03* 2804-2810

opt. bidirectional path switched ring networks for photonic IP networks. *Hayashi, M.*, +, *J-LT Feb 03* 356-364

opt. satellite nets. *Chan, V.W.S.*, *J-LT Nov 03* 2811-2827

Tuning

correction to "Design of two-section DBR laser operating at ITU frequencies only by grating current tuning" (Jun 03 1524-1530). *Seeds, A.J.*, +, *J-LT Dec 03 3477*

U**Ultrafast optics**

glass photonic device fab. by fs laser pulse direct writing. *Florea, C.*, +, *J-LT Jan 03 246-253*

Ultra-wideband

microwave photonics (special section). *J-LT Dec 03 2959-3299*
 microwave photonics (special section intro.). *Seeds, A.J.*, +, *J-LT Dec 03 2959-2961*
 photonic time-stretched ADC: fundamental concepts and practical considerations. *Han, Y.*, +, *J-LT Dec 03 3085-3103*
 ultra-wide-band traveling-wave photodetectors for photonic local oscillators. *Stohr, A.*, +, *J-LT Dec 03 3062-3070*

Underwater cables

DPSK and OOK WDM transm., transoceanic dists. and their perform. degradations, nonlin. phase noise, comparative study. *Mizuochi, T.*, +, *J-LT Sep 03 1933-1943*

V**Variational methods**

matched-clad opt. fibers, variational anal. *Chiadini, F.*, +, *J-LT Jan 03 96-105*

Vectors

3D opt. waveguides, vector modes, modified imaginary dist. BPM. *Chamorro-Posada, P.*, *J-LT Mar 03 862-867*
 anal. of holey opt. fibers, BEM. *Ning Guan*, +, *J-LT Aug 03 1787-1792*
 Er^{3+} -doped photonic cryst. fiber amplif. props., full vector finite-element modal formulation. *Cucinotta, A.*, +, *J-LT Mar 03 782-788*
 integr. opt. waveguides, vectorial BEM anal. *Tao Lu*, +, *J-LT Aug 03 1793-1807*
 opt. props. of deeply etched semicond. electrooptic modulator, optim. *Obayya, S.S.A.*, +, *J-LT Aug 03 1813-1819*
 photonic cryst. fibers for dispers. -related appls., design. *Lin-Ping Shen*, +, *J-LT Jul 03 1644-1651*
 slanted sidewall high index contrast planar silica waveguides, polariz. crosstalk. *Somasiri, N.*, +, *J-LT Jan 03 54-60*
 transverse anisotropic media, finite-element vector beam propag. method. *da Silva, J.P.*, +, *J-LT Feb 03 567-576*
 Vector wave expansion method for leaky modes of microstruct. opt. fibers. *Issa, N.A.*, +, *J-LT Apr 03 1005-1012*

Velocity measurement

BW cancellation in distributed traveling-wave photodetectors. *Murthy, S.*, +, *J-LT Dec 03 3071-3077*

Vibrational modes; cf. Phonons**Volterra integral equations**

time-varying medium layered media, Volterra integral eqn. EM field investig. method. *Fedotov, F.V.*, +, *J-LT Jan 03 305-314*

Volterra series

sync. WDM sys., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu*, +, *J-LT Jan 03 40-53*

W**Water**

moisture, fatigue- and aging-resistant polymer coatings, lightguide fibers, diffusion. *Mrotek, J.L.*, +, *J-LT Aug 03 1775-1778*

Water pollution

Monitoring technol. of salinity in water with opt. fiber sens. *Yong Zhao*, +, *J-LT May 2003 1334-1338*

Wave equations; cf. Helmholtz equations**Waveform analysis; cf. Spectral analysis****Waveguide components; cf. Optical waveguide components****Waveguide couplers; cf. Optical couplers****Waveguide discontinuities**

Cross-orthogonality between guided and radiation modes at opt. waveguide discontinuities. *Ramadan, T.A.*, *J-LT May 2003 1394-1404*

Waveguide filters; cf. Optical waveguide filters**Waveguide lasers**

GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S.*, +, *J-LT Jan 03 170-175*
 InGaAsP-InP 1.55- μm lasers, integrated spot-size converters by fiber-matched ARROW. *Galarza, M.*, +, *J-LT Jan 03 269-274*
 Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003 1339-1349*

Waveguide lasers; cf. Fiber lasers**Waveguides**

anal. of corrugated long-period gratings in slab waveguides and their polarization dependence. *Liu, Q.*, +, *J-LT Dec 03 3399-3405*

Waveguides; cf. Circular waveguides; Planar waveguides; Rectangular waveguides; Rib waveguides; Waveguide discontinuities**Waveguide theory; cf. Optical waveguide theory****Wavelength division multiplexing**

8 $\times$ 10-Gb/s WDM sig. transm. perform., gain-equalized SOAs, backward Raman pumping, DCF, theor. investig. *Sub Hur*, +, *J-LT Jun 03 1499-1503*
 all-opt. mesh nets., path-based flooding, restoration. *Sun-il Kim*, +, *J-LT Nov 03 2605-2616*
 all-opt. switch fabrics, generalized multiprotocol label switching. *Papadimitriou, G.I.*, +, *J-LT Feb 03 384-405*
 all-opt. wavel.-division multiplexed packet nets., collision avoidance. *Elaine Wong*, +, *J-LT Nov 03 2652-2660*
 analog fiber CATV, 50-dB nonlin. crosstalk suppression. *Wong, K.K.Y.*, +, *J-LT Feb 03 500-505*
 blocking perform. anal. of WDM all-opt. nets., effective method. *Jintao Xiong*, +, *J-LT Jun 03 1421-1434*
 broadcast-and-select OADM opt. network, dedicated opt.-channel protection. *Rhee, J.-K.*, +, *J-LT Jan 03 25-31*
 capacity anal. for WDM fiber-radio backbones with star-tree and ring architecture incorporating wavelength interleaving. *Lim, C.*, +, *J-LT Dec 03 3308-3315*
 cct., burst, packet switchings, versatile opt. code-based MPLS. *Kitayama, K.-I.*, +, *J-LT Nov 03 2753-2764*
 Cell-sorting device for creating sync. variable-length opt. packet switches. *Lin, P.J.*, +, *J-LT Apr 03 893-903*
 coded PSK for fiber-optic commun., spectral effic. *Kramer, G.*, +, *J-LT Oct 03 2438-2445*
 composite-packet-switched WDM net., expt. demons. *Boroditsky, M.*, +, *J-LT Aug 03 1717-1722*
 Comprehensive study on XPM- and SRS-induced noise in cascaded IM-DD opt. fiber transm. sys., *Zhi Jiang*, +, *J-LT Apr 03 953-960*
 create bandwidth-abundant IP nets., photonic MPLS router. *Watanabe, A.*, +, *J-LT Nov 03 2851-2862*
 cross-gain modulated SOA wavelength converters, accurate noise charactn. *de la Corte, M.M.*, +, *J-LT Jan 03 182-197*
 crosstalk, noise, and stability anal. of DWDM channels generated by injection locking techniques. *Cai, B.*, +, *J-LT Dec 03 3029-3036*
 customer-controlled and -managed opt. nets. *St Arnaud, B.*, +, *J-LT Nov 03 2804-2810*
 data and voice integrat. over DWDM MAN. *Stavdas, A.*, +, *J-LT Feb 03 372-383*
 dense WDM mm-wave-band radio-on-fiber sig. transm., photonic downconversion. *Kuri, T.*, +, *J-LT Jun 03 1510-1517*
 designing passband flattened DWDM demultiplexers, spatial PM, analytic method. *Zhimin Shi*, +, *J-LT Oct 03 2314-2321*
 direct-detect. DPSK sys., cross-PM-induced nonlin. phase noise. *Hoon Kim*, *J-LT Aug 03 1770-1774*
 dispers. compensating Raman amps., pump reflectors for increased effic. *Nicholson, J.W.*, *J-LT Aug 03 1758-1762*
 Dispersion-managed high-capacity ultra-long-haul transm. *Suzuki, M.*, +, *J-LT Apr 03 916-929*
 dispersion-managed soliton syst. perform., span length random vars. *Chongjin Xie*, +, *J-LT Mar 03 769-775*
 Distributed fiber Raman amps. with localized loss. *Seung Kwan Kim*, +, *J-LT May 2003 1286-1293*

- DPSK and OOK WDM transm., transoceanic dists. and their perform. degradations, nonlin. phase noise, comparative study. *Mizuochi, T.*, +, *J-LT Sep 03* 1933-1943
- DWDM/SCM self-healing archit. for broad-band subscriber networks. *Wen-Piao Lin*, +, *J-LT Feb 03* 319-328
- Efficiency improvement of opt. fiber wavelength converter without spectral spread using sync. phase/FM. *Torii, K.*, +, *J-LT Apr 03* 1039-1045
- efficient packet-switched transport, AWG-based metro WDM net., wavel. reuse. *Scheutzw, M.*, +, *J-LT Jun 03* 1435-1455
- ellipt. whispering-gallery-mode microdisk waveguide filters, tuning. *Boriskina, S.V.*, +, *J-LT Sep 03* 1987-1995
- Er-doped multiwavelength fiber lasers, act. overlapping lin. cavities. *Qinghe Mao*, +, *J-LT Jan 03* 160-169
- erratum to "A genetic algorithm-based methodology for optimizing multiservice convergence in a metro WDM network" (May 03 1114-1133). *Hyo-Sik Yang*, +, *J-LT Nov 03* 2953-2954
- error probab., presence of in-band crosstalk noise, WDM nets., accurate estim. *Kamalakis, T.*, +, *J-LT Oct 03* 2172-2181
- Estimation of perform. degrad. of bidirectional WDM transm. systs. due to Rayleigh backscatt. and ASE noises using num. and anal. models. *Jeongyun Ko*, +, *J-LT Apr 03* 938-946
- evaluating joint second-order PMD stats., fast and accurate method. *Forestieri, E.*, *J-LT Nov 03* 2942-2952
- extended optical fiber line testing system using eight-channel L/U-band crossed optical waveguide coupler for L-band WDM transmission. *Araki, N.*, +, *J-LT Dec 03* 3316-3322
- FBG cascades, power penalties due to in-band/out-of-band dispersion. *Yla-Jarkko, K.H.*, +, *J-LT Feb 03* 506-510
- Fiber-Bragg-grating external cavity semicond. laser (FGL) module for DWDM transm. *Hashimoto, J.I.*, +, *J-LT Sep 03* 2002-2009
- fiber-to-the-desk appl., ethernet-based pass. opt. LAN. *Radovanovic, I.*, +, *J-LT Nov 03* 2534-2545
- Four-wave mixing between pump and sig. in distributed Raman amp. *Tsu-Te Kung*, +, *J-LT May 2003* 1164-1170
- freq.-interleaved DWDM mm-wave radio-on-fiber systs., DEMUX, arrayed-waveguide grating. *Toda, H.*, +, *J-LT Aug 03* 1735-1741
- full-cycle-coupler-based opt. ADM and perform. characts., 40-Gb/s WDM nets. *Riziotis, C.*, +, *J-LT Aug 03* 1828-1837
- GaP-AlGaP tapered waveguide semicond. Raman amps., pulse-pumped high-gain operation. *Saito, S.*, +, *J-LT Jan 03* 170-175
- Genetic algm.-based methodology for optimizing multiservice convergence in metro WDM network. *Hyo-Sik Yang*, +, *J-LT May 2003* 1114-1133
- high-channel-count chromatic dispers. compensation, phased-only sampled fiber Bragg gratings. *Hongpu Li*, +, *J-LT Sep 03* 2074-2083
- high-output-power polariz.-insensitive SOA, WDM syst. switching elements. *Morito, K.*, +, *J-LT Jan 03* 176-181
- HORNET archit, demons. and syst. anal. *White, I.M.*, +, *J-LT Nov 03* 2489-2498
- implement. of label-controlled arrayed waveguide packet router, opt. IM/FSK coding tech. *Vlachos, K.*, +, *J-LT Nov 03* 2617-2628
- increasing carrier lifetimes, semicond. opt. amps., reducing crosstalk and sig. distortion. *Shuangmei Xu*, +, *J-LT Jun 03* 1474-1485
- influence of high optical power light launched into optical fibers in MT connector. *Hogari, K.*, +, *J-LT Dec 03* 3344-3348
- Investigation of effect of injection locking between pump lasers on redundant pumping scheme for erbium-doped fiber amps. *Motoshima, K.*, +, *J-LT May 2003* 1358-1369
- Investigation of syst. upgradability over installed fiber-optic cable using 40-Gb/s WDM sigs. toward multiterabit opt. networks. *Otani, T.*, +, *J-LT Apr 03* 947-952
- IP/MPLS, ASON/GMPLS test bed of IST project LION. *Cavazzoni, C.*, +, *J-LT Nov 03* 2791-2803
- LiNbO₃ static-strain-induced grating low-loss opt. ADM. *Pingsheng Tang*, +, *J-LT Jan 03* 236-245
- LiNbO₃ tunable spectral slicing waveguide filter design, DWDM appls. *Taylor, H.F.*, *J-LT Mar 03* 837-847
- logarithmic wavel. demultiplexers. *Cincotti, G.*, +, *J-LT Jun 03* 1576-1583
- low-dens. WDM line systs. for long-haul nets., merits. *Gerstel, O.*, +, *J-LT Nov 03* 2470-2475
- mm-wave fiber-radio backbone, 25-GHz WDM ring nets., merging. *Lim, C.*, +, *J-LT Oct 03* 2203-2210
- mm-wave WDM-fiber wireless network, wavelength-interleaved OADMs. *Marra, C.*, +, *J-LT Jan 03* 32-39
- multimedia streams, WDMA nets., efficient protocols. *Lixin Wang*, +, *J-LT Oct 03* 2123-2144
- multiwavelength opt. packet-switched network, contention-resoln. schemes. *Shun Yao*, +, *J-LT Mar 03* 672-683
- near-field and far-field attenuation models for free-space variable optical attenuators. *Zhang, X.M.*, +, *J-LT Dec 03* 3417-3426
- nets., shared risk link groups, trap avoidance and protection schemes. *Dahai Xu*, +, *J-LT Nov 03* 2683-2693
- networks, wavelength converter placement, optim. model. *Suixiang Gao*, +, *J-LT Mar 03* 684-694
- N×N multiwavelength opt. cross-connect based on tunable FBGs. *Nam Su Moon*, +, *J-LT Mar 03* 703-718
- N× several tens of Gb/s WDM transm., integr.-optic dispers. slope equalizer. *Takiguchi, K.*, +, *J-LT Nov 03* 2463-2469
- opt. carrier supply module, flattened opt. multicarrier gener., sinusoidal amplit. and phase hybrid modulation. *Fujiwara, M.*, +, *J-LT Nov 03* 2705-2714
- optically assisted Internet routing, arrays of dynamically reconfigurable FBG-based correlators. *Hauer, M.C.*, +, *J-LT Nov 03* 2765-2778
- optimized InGaAsP/InP polariz. converter employing asymmetric rib waveguides. *El-Refaei, H.*, +, *J-LT Jun 03* 1544-1548
- opt. label encoding, electroabsorption modulators and investig. of chirp props. *Xu, L.*, +, *J-LT Aug 03* 1763-1769
- opt. nets., differentiated reliab. *Tacca, M.*, +, *J-LT Nov 03* 2576-2586
- opt. nets., waveband grooming and IP aggregation. *Parthiban, R.*, +, *J-LT Nov 03* 2476-2488
- opt. packet switching net., enhanced edge routers, end-to-end contention resoln. schemes. *Fei Xue*, +, *J-LT Nov 03* 2595-2604
- opt. reconfigurability and restoration, integr. opt. cross-connects, realizing advantages. *Strand, J.*, +, *J-LT Nov 03* 2871-2882
- opt. regeneration, 40 Gb/s and beyond. *Leclerc, O.*, +, *J-LT Nov 03* 2779-2790
- opt. transm. systs., constraint-based design. *Alicherry, M.*, +, *J-LT Nov 03* 2499-2510
- Packaging, fiber Bragg grating with metal coating for athermal design. *Yu-Lung Lo*, +, *J-LT May 2003* 1377-1383
- packet-over-WDM nets., data-centric networking, multiwavelength headers/labels. *Skoufis, C.*, +, *J-LT Oct 03* 2110-2122
- Performance failure anal. of EDFA cascades in opt. DWDM packet-switched networks. *Araci, I.E.*, +, *J-LT May 2003* 1156-1163
- Physical/logical topol. design of large-scale opt. networks. *Yufeng Xin*, +, *J-LT Apr 03* 904-915
- polariz. degrad., cross-PM and impact, polariz.-mode dispers. compensators, degree. *Bononi, A.*, +, *J-LT Sep 03* 1903-1913
- polariz.-depend. loss, accurate spectral charactn. *Craig, R.M.*, *J-LT Feb 03* 432-437
- Protecting multicast sessions in WDM opt. mesh networks. *Singhal, N.K.*, +, *J-LT Apr 03* 884-892
- pump-modulated FWM scheme, dispers.-shifted fibers, regenerative props. *Bogris, A.*, +, *J-LT Sep 03* 1892-1902
- reducing pump-sig. FWM interact., copumped distrib. Raman amps., Raman pump module. *Di Pasquale, F.*, +, *J-LT Aug 03* 1742-1748
- regenerative all-opt. wavel. converter, transparent demons., 42 nodes and 16800 km, nonblocking all-opt. cross connect. *Leuthold, J.*, +, *J-LT Nov 03* 2863-2870
- sig. distortion and crosstalk penalties induced by opt. filters, opt. nets. *Downie, J.D.*, +, *J-LT Sep 03* 1876-1886
- simultaneous label swapping and wavel. conversion of multiple independent WDM channels, all-opt. MPLS net., PPLN waveguides, wavel. converters. *Gurkan, D.*, +, *J-LT Nov 03* 2739-2745
- simultaneous transm. of data and digital broadcast video service, bidirectional WDM PON. *Son, E.S.*, +, *J-LT Aug 03* 1723-1727
- single-mode opt. fiber arrays, high-precision charactn. *Bernussi, A.A.*, +, *J-LT Jun 03* 1557-1561
- single-mode opt.-fiber cable networks for WDM systs., transm. characts. *Hogari, K.*, +, *J-LT Feb 03* 540-545
- Some enabling techs. for polariz. mode dispersion compensation. *Sandel, D.*, +, *J-LT May 2003* 1198-1210
- spectrum-sliced incoherent light for wide-area access net., super-DWDM transm. *Akimoto, K.*, +, *J-LT Nov 03* 2715-2722

stat. Raman crosstalk, WDM syst., multiple-wavel. bidirectionally pumped Raman amplif., perform. limitation. *Xiang Zhou*, +, *J-LT Oct 03* 2194-2202

Super-DWDM transm. technol. in zero-dispersion region employing distributed Raman amplif. *Suzuki, H.*, +, *J-LT Apr 03* 973-981

survivable multicast sessions against single link failures, opt. WDM mesh nets., provisioning. *Singhal, N.K.*, +, *J-LT Nov 03* 2587-2594

survivable opt. mesh nets., control and mgt. protocols. *Assi, C.*, +, *J-LT Nov 03* 2638-2651

Survivable WDM mesh networks. *Ramamurthy, S.*, +, *J-LT Apr 03* 870-883

sync./asynchronous all-opt. switching archits., wavelength converter requirement. *Eramo, V.*, +, *J-LT Feb 03* 340-355

sync. WDM systs., cross-PM induced crosstalk, Volterra series transfer fn. method. *Bo Xu*, +, *J-LT Jan 03* 40-53

telecomm. lasers, wavel. stabilizer. *Colace, L.*, +, *J-LT Aug 03* 1749-1757

toward Tb/s capacities over multimode fiber links using SCM/WDM techniques. *Tyler, E.J.*, +, *J-LT Dec 03* 3237-3243

transient dynamics of EDFA pumped by 1480- and 980-nm lasers, anal. and control. *Tian, C.*, +, *J-LT Aug 03* 1728-1734

transparent ultra-long-haul DWDM nets., broadcast-and-select OADM/OXC archit. *Vasilyev, M.*, +, *J-LT Nov 03* 2661-2672

tree-shared multicast opt. burst-switched WDM networks. *Myoungki Jeong*, +, *J-LT Jan 03* 13-24

ultradense WDM channels, beat-freq.-locking method, accurate alignment. *Sang-Yuep Kim*, +, *J-LT Nov 03* 2891-2894

ultrafast nonlin. interferometer (UNI)-based digital opt. ccts. and their, packet switching. *Bintjas, C.*, +, *J-LT Nov 03* 2629-2637

ultra-high-capacity IP routers, opt. switch fabrics. *Gripp, J.*, +, *J-LT Nov 03* 2839-2850

Ultra-wide-band tellurite-based fiber Raman amp. *Mori, A.*, +, *J-LT May 2003* 1300-1306

wavel. channel data rewrite, saturated SOA modulator for WDM nets., centralized light sources. *Takesue, H.*, +, *J-LT Nov 03* 2546-2556

Wavelength conversion of SCM sigs. using SOA, theory, expts., and appls. *Capmany, J.*, +, *J-LT Apr 03* 961-972

wavelength multiplexed fiber Bragg gratings, network sens. appls. *Abad, S.*, +, *J-LT Jan 03* 127-131

wavel./time (W/T) matrix codes for opt. CDMA, design and perform. anal. *Mendez, A.J.*, +, *J-LT Nov 03* 2524-2533

wide geographical opt. fiber transport networks, Gb/s transm. *Matera, F.*, +, *J-LT Feb 03* 456-465

White noise

in-channel OSNR and BER meas., temporal superresolution via dyn. range conversion. *Zalevsky, Z.*, +, *J-LT Nov 03* 2734-2738

Wide area networks

all-opt. packet-switched networks, arbitrary topol., self-routing address scheme. *Yuan, X.C.*, +, *J-LT Feb 03* 329-339

customer-controlled and -managed opt. nets. *St Arnaud, B.*, +, *J-LT Nov 03* 2804-2810

packet-over-WDM nets., data-centric networking, multiwavelength headers/labels. *Skoufis, C.*, +, *J-LT Oct 03* 2110-2122

spectrum-sliced incoherent light for wide-area access net., super-DWDM transm. *Akimoto, K.*, +, *J-LT Nov 03* 2715-2722

Y

Ytterbium

10-W Raman fiber lasers, 1248 nm, phosphosilicate fibers. *Xiong, Z.*, +, *J-LT Oct 03* 2377-2381

double-clad fiber amps. for high-power pulse amplif., dyn. characts. *Yong Wang*, +, *J-LT Oct 03* 2262-2270

modeling high-power Er^{3+} - Yb^{3+} codoped fiber lasers. *Yahel, E.*, +, *J-LT Sep 03* 2044-2052

Sol-gel silica-on-silicon buried-channel EDWAs. *Huang, W.*, +, *J-LT May 2003* 1339-1349