

# All-optical Network Access And Demultiplexing Using Nonlinear Optical Loop Mirrors With Novel Fibers

Janet W Lou

All-optical Network Access And Demultiplexing Using Nonlinear . and demultiplexing using nonlinear optical loop mirrors with novel fibers. [Janet W Lou] ... Nonlinear loop mirror-based all-optical signal processing in fiber-optic ... All-optical network access and demultiplexing using nonlinear . Bit-rate flexible all-optical demultiplexing using a nonlinear optical . Lawrence R Chen - McGill University routing, switching and intelligence are handled optically. In this network, data ... novel devices for all optical processing by using multiple quantum well(MQW) ..... XPM in fiber based devices, named NOLM(nonlinear optical loop mirror)[10], ... (XPM), functions of all-optical wavelength conversion, OTDM, DEMUX, 2R or 3R. Selected Publications - The Chinese University of Hong Kong Get this from a library! All-optical network access and demultiplexing using nonlinear optical loop mirrors with novel fibers. 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All-fiber ring soliton laser mode locked with a nonlinear mirror. Optics ... All-optical arbitrary demultiplexing at 2.5 Gbits/s with tolerance to timing jitter ... Soliton switching using cascaded nonlinear-optical loop mirrors ..... A novel self-routing address scheme for all-optical packet-switched networks with arbitrary topologies A. Bononi All-optical Network Access And Demultiplexing Using. Nonlinear Optical Loop Mirrors With Novel Fibers by Janet W Lou. Hello! On this page you can download ... Transparent Optical Networks with Time-Division Multiplexing . All-optical demultiplexing schemes based on cross-phase modulation in a conventional nonlinear optical fiber loop mirror (NOLM) switch generally suffer from a . All-Optical Logic Gates: Designs, Classification, and Comparison Publication » All-optical network access and demultiplexing using nonlinear optical loop mirrors with novel fibers. Polarization-independent optical demultiplexing by conventional . 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Scheme for High Speed Packet TDM Networks", IEEE Photon. ?All-Optical Modulation Format Conversion and Multicasting Using . tical fiber communication, optical signal processing, wavelength conversion. ... packed DWDM access networks. All-optical ... future long-haul networks may be time-division demultiplexed to a lower bit ... and a nonlinear optical loop mirror (NOLM) [10]. ..... [9] H. J. Lee, S. J. B. Yoo, and C. S. Park, "Novel all-optical 10 Gbp/s. Catalog Record: All-optical network access and demultiplexing . All-optical network access and demultiplexing using nonlinear optical loop mirrors with novel fibers. Front Cover. Janet W. Lou. University of Michigan, 2000. All-optical network access and demultiplexing using nonlinear . Ultra-high speed optical time-division-multiplexed (TDM) networks, operating at . Users can access the HLAN at their guaranteed rate using only a counter, ... Currently, the only logic gates operating at 100 Gb/s are all-optical logic gates [6,7]. ... Gb/s was reported simultaneously for a nonlinear optical loop mirror (NOLM) ... Formats and Editions of All-optical network access and . - WorldCat This thesis presents an all-optical demultiplexer based on semiconductor opti- cal amplifiers (SOA) . 2.4 Semiconductor Laser Amplifier in a Loop Mirror ..... 10 ... 3.5 Expected Advantages of the Novel GS Switching Scheme .....23. 4 ..... terferometer structures using the nonlinearity in semiconductor material, vari-. All-optical network access and demultiplexing using nonlinear . ?Ultrafast all-optical logic gate using a nonlinear optical loop mirror based multi-periodic transfer function . Open Access ... T. Yamamoto, E. Yoshida, and M. Nakazawa, Ultrafast nonlinear optical loop mirror for demultiplexing 640 Gbit/s ... and M. Renaud, Novel Scheme for Simple Label-Swapping Employing XOR Logic in ... pulses broadened via self-phase modulation in a highly nonlinear fibre using a broadband . 5.2 OTDM Signal Demultiplexing Based on Kerr switching of Linearly- ..... 5.10 Nonlinear optical loop mirror using a 1-km long dispersion-shifted ..... frastructure, network nodes at the interface with the access network might not be. All-optical differential detection for suppressing multiple-access . All-optical network access and demultiplexing using nonlinear optical loop mirrors with novel fibers. Front Cover. Janet W. Lou. University of Michigan, 2000. Monolithically Integrated Gain Shifted Mach-Zehnder . - OPUS 4

All-optical network access and demultiplexing using nonlinear optical loop mirrors with novel fibers. by Janet W Lou. Thesis/dissertation : Thesis/dissertation ... A novel self-routing address scheme for all-optical packet-switched . CHENG Zhenzhou; XU Ke; WONG Chi Yan and H.K. TSANG, IEEE Optical ..... Reconfigurable OTDM demultiplexing using time- and wavelength-interleaved pulses in an optical ... Novel fiber interferometric devices for optical signal processing, ... Delay-asymmetric nonlinear loop mirror for bit-rate variable RZ-to-NRZ format ... 100 Gb/s Multi-Access Networks - IEEE Photonics Society 20 Jul 1993 . Time-domain multiple access techniques are exploited in novel ... Architecture and Techniques—All Optical Networks 167 ... recirculating fiber delay loops, with no need of optical amplification in the loop. ... structures using de?ection routing, then a net gain in throughput can effectively be ..... mirror [26]. High-Speed Broadband Polarization-Independent Optical . - MIT Abstract: A novel scheme for suppressing the multiple-access interference . A. S. Holmes and R. R. A. Syms, "All-optical CDMA using "Quasi-prime" ... M. E. Marhic, "Coherent optical networks," J. of Lightwave Technol. ... All-optical noise suppression using two-stage highly-nonlinear fibre loop ... loop mirror (DC-NOLM). Novel All-Optical Switching and Processing Techniques for Optical . 9 Feb 2014 . All-optical gates may be constructed using the nonlinearity effect which is ... This type of gate design using the length of fiber to produce a phase shift makes ... Novel design of all-optical logic AND/OR designed by using dark bright ..... using randomly birefringent fiber in a nonlinear optical loop mirror," in ... All-optical Network Access And Demultiplexing Using Nonlinear . We report here a novel optical dithering scheme that eliminates polarization . The conventional method for clock recovery in optical networks uses a fast ... endemic to all phase-locked loop systems that rely on unipolar cross-correlation signals for ... One solution to this problem is to generate the bipolar error signal using ... All-optical network access and demultiplexing using nonlinear . Invited Paper On Archetecture and Limitation of Optical Multiprotocol . transparent all-optical networks that may overcome the band- width bottlenecks . access protocols;. 3) routing control is ... frame format, sent through the optical ?ber, and demultiplexed ..... 6:l [52]. Phase-dependent switching in a nonlinear loop mirror ... reduced by a novel technique using birefringent ?bers with cross-axis ... All-optical network access and demultiplexing using nonlinear . All-optical Network Access And Demultiplexing Using Nonlinear Optical Loop Mirrors With Novel Fibers. by Janet W Lou. Homepage · DMCA · Contact ... Ultrafast all-optical logic gate using a nonlinear optical loop mirror . In this paper, for the second approach, an optical MPLS network using OOC/ . For a wavelength-division OMPLS network, the all-optical label switching router .... converter is a modified TOAD (terahertz optical asymmetric demultiplexer) that ..... et al., "Nonlinear optical loop mirror based on standard communication fiber,".