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<i>D. Geisler, N. Fontaine, R. Scott, T. He, L. Paraschis, O. Gerstel, J. Heritage, S. Yoo</i>	
FLEXIBLE-BANDWIDTH, IMPAIRMENT-AWARE TRANSMITTER BASED ON PARALLEL SYNTHESIS OF OPTICAL FREQUENCY COMBS	1935
<i>T. He, R. Scott, D. Geisler, N. Fontaine, O. Gerstel, L. Paraschis, J. Heritage, S. Yoo</i>	
FLEXIBLE AND COMPACT HIERARCHICAL OPTICAL CROSS-CONNECT NODE WITH WAVEBAND ADD/DROP RESTRICTION	1938
<i>R. Hirako, K. Ishii, H. Hasegawa, K. Sato, H. Takahashi, M. Okuno</i>	
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<i>A. Chowdhury, H. Chien, S. Fan, J. Yu, N. Jayant, G. Chang</i>	
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<i>X. Xu, E. Zhou, Y. Liang, T. Yuk, K. Lui, K. Wong</i>	
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<i>T. Pham, N. Gonzalez, X. Yu, D. Zibar, L. Dittmann, I. Monroy</i>	

5 GBPS IR-UWB SIGNAL GENERATION AND FIBER TRANSMISSION BASED ON OPTICAL PULSE COMPRESSION	1960
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TRANSPORT NETWORKS AT A CROSSROADS: THE ROLES OF MPLS AND OTN IN PACKET TRANSPORT NETWORKS	1963
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BUFFERLESS OPTICAL CLOS SWITCHES FOR DATA CENTERS	1966
<i>H. Chao, K. Xi</i>	
OPTICAL NETWORKING FOR CLOUD COMPUTING	1969
<i>T. Bohnert, S. Figuerola, N. Ciulli, D. Simeonidou, P. Vicat-Blanc</i>	
OPTICAL PACKET SWITCHING MEETS MYTHBUSTERS	1971
<i>R. Tucker</i>	
OPTICAL SYSTEMS FOR DATA CENTERS	1972
<i>R. Ho, H. Schwetman, M. McCracken, P. Koka, J. Lexau, J. Cunningham, X. Zheng, A. Krishnamoorthy</i>	
THE EMERGING OPTICAL DATA CENTER	1975
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HARDWARE REQUIREMENTS FOR OPTICAL CIRCUIT SWITCHED DATA CENTER NETWORKS	1978
<i>N. Farrington, Y. Fainman, H. Liu, G. Papen, A. Vahdat</i>	
A BIDIRECTIONAL 2×2 PHOTONIC NETWORK BUILDING-BLOCK FOR HIGH-PERFORMANCE DATA CENTERS	1981
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FIBER AND COPPER CABLING IN DATA CENTERS	1984
<i>D. Coleman</i>	
TRAFFIC GROOMING IN SPECTRUM-ELASTIC OPTICAL PATH NETWORKS	1986
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SURVIVABLE TRANSPARENT FLEXIBLE OPTICAL WDM (FWDM) NETWORKS	1989
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SPECTRUM EFFICIENT SUPER-CHANNELS IN DYNAMIC FLEXIBLE GRID NETWORKS – A BLOCKING ANALYSIS	2001
<i>S. Thiagarajan, M. Frankel, D. Boertjes</i>	
DYNAMIC ROUTING AND FREQUENCY SLOT ASSIGNMENT FOR ELASTIC OPTICAL PATH NETWORKS THAT ADOPT DISTANCE ADAPTIVE MODULATION	2004
<i>T. Takagi, H. Hasegawa, K. Sato, Y. Sone, B. Kozicki, A. Hirano, M. Jinno</i>	
DEFAGMENTATION OF TRANSPARENT FLEXIBLE OPTICAL WDM (FWDM) NETWORKS	2007
<i>A. Patel, P. Ji, J. Jue, T. Wang</i>	
IMPACT OF FIBER PARAMETERS ON NONLINEAR FIBER CAPACITY	2010
<i>R. Essiambre</i>	
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<i>M. Bigot-Astruc, L. Provost, G. Krabshuis, P. Dhenry, P. Sillard</i>	
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