Building packet buffers using interleaved memories p. 1
Byte-focal: a practical load balanced switch p. 6
Load-balancing in clos-like packet switches with distributed cross-point queues p. 13
Click vs. Linux: two efficient open-source IP network stacks for software routers p. 18
ROSE: a novel link state information update scheme for QoS routing p. 24
Introducing node adaptation capability descriptor in GMPLS multi-region networks p. 29
On maximum available bandwidth through disjoint paths p. 34
Replace MPLS with EPFTS to build a SUPANET p. 39
Limits on the traffic carrying capacity of all optical networks with ring topology p. 44

A novel optical storage area network implemented in a metro WDM setting p. 49
Crosstalk-free photonic switching networks p. 53
Optical burst transport network (OBTN) - a novel architecture for efficient transport of optical burst data over lambda grids p. 58
Mutual priority: a scheme for effective and efficient distributed schedulers for high-speed cell-based switches p. 63
HCF: a starvation-free practical algorithm for maximizing throughput in input-queued switches p. 68
Multicast scheduling in buffered crossbar switches with multiple input queues p. 73
LCCF: a scheduling algorithm for asynchronous optical switches p. 78
A regenerator pool dimensioning method to avoid early blocking p. 83
Routing and restoration in networks with hose-model traffic patterns p. 88
Improvements on fault localization in GMPLS-based networks p. 94
A cost-effective implementation of fast GMPLS shared protection for IP over 10 gigabit ethernet networks p. 100
Parallel multiple hashing for packet classification p. 104
Efficient packet classification using spatial cutting p. 108
Hybrid open hash tables for network processors p. 113
Pipelined architecture for fast IP lookup p. 118
On the relationship of node capacity distribution and P2P topology formation p. 123
On finding the best partial multicast protection tree under dual-homing architecture p. 128

Reliable multicast for control in distributed routers p. 133
Per-hop based scheduling for delay bounded search in Gnutella-like networks p. 138
Designing and evaluating network processor applications p. 142
Building next generation, open, secure, reliable and scalable experimental IP networks p. 147
Design and performance evaluation of scalable TWIN networks p. 152
A method of detecting performance degradation at TCP flow level from sampled packet streams p. 157
Extending WLAN coverage using infrastructureless access points p. 162
Supporting real-time service in Bluetooth networks p. 167
REFWA plus: enhancement of REFWA to combat link errors in LEO satellite networks p. 172
Coverage and connectivity control of wireless sensor networks under mobility  p. 177
A novel delay-bounded traffic conditioner for optical edge switches  p. 182
Achieving max-min fairness in WDM optical burst switching networks  p. 187
Performance analysis of storage area network switches  p. 192
Fault tolerance study on large scale Benes switches  p. 197
Self regulating traffic distribution - a distributed traffic engineering and resilience concept  p. 202
Next generation WDM networks with multi-channel protection, recovery and equalization  p. 207
Fast scheduling for optical packet switches with minimum configurations  p. 212
Stability of frame-based maximal weight matching algorithms with reconfiguration delays  p. 217
On optimization of optical packet switches with reconfiguration overhead  p. 222
Reducing external speedup requirements for input-queued crossbars  p. 227
Non cooperative path characterization using packet spacing techniques  p. 232
Path-coupled signaling for NAT/firewall traversal  p. 237
MIMO medium access control and routing in ad hoc networks : a holistic perspective  p. 242
An improved OSPF-TE in GMPLS-based optical networks  p. 247
TrueWay : a highly scalable multi-plane multi-stage buffered packet switch  p. 252
Flow mapping in the load balancing parallel packet switches  p. 257
Speedup of clos packet switches that provide delay guarantees  p. 262
An optical cross connected architecture based on planar lightwave circuit switches  p. 267
A unified framework for the assessment of recovery procedures  p. 272
Performance improvement of turbo coded multi-route multi-hop networks using parity check codes  p. 277
Resilient routing layers and p-cycles : tradeoffs in network fault tolerance  p. 282
On using forward error correction for loss recovery in optical burst switched networks  p. 287
Parameter impact on the performance of partial label switching (PLS)  p. 292
On bursty packet loss model for TCP performance analysis  p. 297
A network properties-aware service model for mobile ad hoc networks  p. 302
Performance analysis of WDM optical buffers for asynchronous variable length packets  p. 307
Centralized and distributed approximation algorithms for routing and weighted max-min fair bandwidth allocation  p. 312
An embedded solution to IBGP oscillations  p. 317
A distributed bandwidth reservation algorithm for QoS routing in TDMA-based mobile ad hoc networks  p. 322
Optimal capacity provisioning in communication networks with random demand  p. 327
Evaluation of MMRS and MMRRS packet scheduling algorithms for VOQ switches under bursty packet arrivals  p. 332
Expelling policies for shared memory fast packet switches with variable size packets of multiple priority  p. 337
Analysis of a flow control system for a combined input-crosspoint buffered packet switch  p. 336

Fuzzy logic-based dynamic routing management policies for mobile ad hoc networks p. 341

A self-learning route selection scheme using multi-path searching packets in an OBS network p. 346

A geography-free routing protocol for wireless sensor networks p. 351

Performance evaluation of ethernet resilience mechanisms p. 356

Effects of backup routes and cache timeout mechanism on reliable source routing in mobile ad-hoc networks p. 361

Experimental comparison of handoff performance of SIGMA and mobile IP p. 366

Distributed topology control in wireless ad hoc networks using [beta]-skeletons p. 371

An efficient elliptic curve cryptography based authenticated key agreement protocol for wireless LAN security p. 376

Correlative power control for single channel ad hoc networks p. 381

Compact explicit multi-path routing for LEO satellite networks p. 386

QoS provisioning and traffic engineering in MPLS-based next generation mobile wireless networks p. 391

A class-pining election scheme for loop-free QoS routing p. 396

Self-tuning multiloop PI rate controller for an MIMO AQM router with interval gain margin assignment p. 401

Lagrangian-relaxation based mesh traffic grooming for network profit optimization p. 406

On factors affecting the performance of dynamically groomed optical WDM mesh networks p. 411

Distributed clustering method for large-scaled wavelength routed networks p. 416

Routing and wavelength assignment with maximum resource sharing in WDM mesh networks with path-based protection p. 421

Survivable routing and wavelength assignment (RWA) in optical virtual private networks (O-VPNs) p. 426

Serving dynamic groups in application-level multicast p. 432

Blocking probability of a high-speed optical switching network in presence of component failures p. 437

Measuring conditional Web throughput p. 442

OSPF flooding process optimization p. 448

Time-efficient near-optimal wavelength assignment in dynamically-reconfigurable WDM networks p. 453

Bandwidth management and delay control over EPONs p. 457

A new fast packet classification algorithm: RC-FST p. 462

Offline wavelength assignment in labelled optical burst switching networks p. 467

Fast fair arbiter design in packet switches p. 472

BGP-based inter-domain traffic engineering in BGP/MPLS VPNs p. 477

An efficient scheduling mechanism with flow-based packet reordering in a high-speed network processor p. 481

Impact of scan-planes on memory-bandwidth of the sliding-window switch p. 486

Binary search in a balanced tree for IP address lookup p. 490
Performance analysis of burst segmentation schemes supporting multiple traffic classes

A novel large-scale AWG-based single-hop WDM network with collision avoidance

A two-dimensional binary prefix tree for packet classification

Performance analyses of regular networks with limited number of wavelength converters by employing deflection routing

Virtual topology reconfiguration in hierarchical cross-connect WDM networks

Modularized two-step vertical handoff scheme in integrated WWAN and WLAN

A simplified routing and simulating scheme for the LEO/MEO two-layered satellite network

A new WDM photonic cross-connect architecture based on wavelength exchange optical crossbar

Performance modeling of optical buffers supporting variable length packets

Wavelength sharing algorithm for optical buffers in GMPLS-based WDM optical packet-switched network

Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.