

教育研究業績書

大阪大学大学院情報科学研究科
情報ネットワーク学専攻

村田正幸

2004 年 4 月 1 日現在

目次

1. 研究業績	3
1.1. 欧文学術論文	3
1.2. 和文学術論文	8
1.3. 国際会議発表論文	11
1.4. 著書	26
1.5. 学会誌解説	27
1.6. 学会講演・パネル	27
1.7. 標準化団体寄書	29
1.8. 特許	30
2. 教育業績	31
3. 学会活動	32
3.1. 所属学会	32
3.2. 学会活動	32
3.3. 国際会議委員	33
4. その他の活動	36
5. 受賞歴	39

1. 研究業績

1.1. 欧文学術論文

- [1] Satoshi Doi, Shingo Ata, Hiroshi Kitamura, and Masayuki Murata, “IPv6 anycast for simple and effective communications,” to appear in *IEEE Communications Magazine, Internet Technology Series*, May 2004.
- [2] Go Hasegawa, Tatsuhiko Terai, Takuya Okamoto, and Masayuki Murata, “Scalable resource management for high-performance Web servers,” to appear in *International Journal of Communication Systems*, September 2004.
- [3] Hiroaki Harai and Masayuki Murata, “Performance analysis of prioritized buffer management in photonic packet switches for DiffServ assured forwarding,” to appear in *Photonic Network Communications*, February 2004
- [4] Kouhei Fujimoto, Shingo Ata, and Masayuki Murata, “Adaptive playout buffer algorithm for enhancing perceived quality of streaming applications,” to appear in *Telecommunication Systems Journal*, April 2004.
- [5] Taichi Yuki, Takayuki Yamamoto, Masashi Sugano, Masayuki Murata, Hideo Miyahara, and Takaaki Hatauchi, “Improvement of TCP throughput by combination of data and ACK packets in ad hoc networks,” *IEICE Transactions on Communications*, January 2004.
- [6] Takayuki Yamamoto, Masashi Sugano, Masayuki Murata, Takaaki Hatauchi, and Yohei Hosooka, “Performance Improvement of an Ad Hoc Network System for Wireless Data Service,” *IEICE Transactions on Communications*, vol. E86-B, no. 12, pp. 3559-3568, December 2003.
- [7] Ken-Ichi Kitayama and Masayuki Murata, “Versatile Optical Code-Based MPLS for Circuit, Burst, and Packet Switching,” *IEEE Journal of Lightwave Technology*, Vol. 21, No. 11, pp.2753-2764, November 2003.
- [8] Shinya Ishida, Shin'ichi Arakawa, Masayuki Murata, “Reconfiguration of Logical Topologies with Minimum Traffic Disruptions in Reliable WDM-based Mesh Networks,” *Photonic Network Communications*, Vol. 6, No. 3, pp. 265-277, November 2003.
- [9] Junichi Katou, Shin'ichi Arakawa, Masayuki Murata, “A Design Method for Logical Topologies with Stable Packet Routing in IP over WDM Network,” *IEICE Transactions on Communications*, Vol. E86-B, No. 8, pp. 2350-2357, August 2003.
- [10] Takashi Yamaguchi, Ken-ichi Baba, Masayuki Murata, and Ken-ichi Kitayama, “Scheduling Algorithm with Consideration to Void Space Reduction in Photonic Packet Switch,” *IEICE Transactions on Communications*, Vol.E86-B, No.8, pp.2310-2318, August 2003.
- [11] Masahiro Sasabe, Naoki Wakamiya, Masayuki Murata, and Hideo Miyahara, “Proxy Caching Mechanisms with Quality Adjustment for Video Streaming Services,” *IEICE Transactions on Communications Special Issue on Content Delivery Networks*, Vol. E86-B, pp. 1849-1858, June 2003.
- [12] Shin'ichi Arakawa, Junichi Katou, and Masayuki Murata, “Design Method of Logical Topologies with Quality of Reliability in WDM Networks,” *Photonic Network Communications*, Vol. 5, no. 2, pp. 107-121, March 2003.
- [13] Masahiro Miyoshi, Masashi Sugano and Masayuki Murata, “Improving TCP Performance for Wire-

- less Cellular Networks by Adaptive FEC Combined with Explicit Loss Notification,” *IEICE Transactions on Fundamentals of Electronics*, Vol. E85-B, No.10, pp. 2208-2213, October 2002.
- [14] Shin’ichi Arakawa and Masayuki Murata, “Lightpath Management of Logical Topology with Incremental Traffic Changes for Reliable IP over WDM Networks” *Optical Networks Magazine*, Vol. 3, No. 3, pp. 68-76, May-June 2002.
 - [15] Doo Seop Eom, Heyung Sub Lee, Masashi Sugano, Masayuki Murata and Hideo Miyahara, “Improving TCP Handoff Performance in Mobile IP Based Networks” *Computer Communications*, Vol.25, No.7, pp. 635-646, May 2002.
 - [16] Ken-ichi Baba, Takashi Yamaguchi, Kazuhiro Gokyu and Masayuki Murata, ”A Path Accommodation Method for Reliable Ring Networks with Optical Compression TDM,” *International Journal of Communication Systems*, Vol.15, No.2-3, pp.221-237, March 2002.
 - [17] Go Hasegawa, Keniji Kurata and Masayuki Murata, “A Study on High Speed Packet Scheduling Method for Achieving Fairness among TCP Connections,” *Journal of High Speed Network*, Vol. 12, Nos. 1&2, pp.29-50, 2003.
 - [18] Go Hasegawa, Takahiro Matsuo, Masayuki Murata and Hideo Miyahara, “Comparisons of Packet Scheduling Algorithms for Fair Service among Connections on the Internet,” *Journal of High Speed Network*, Vol. 12, No. 1&2, pp. 1-28, 2003.
 - [19] Masayuki Murata, “On a Network Dimensioning Approach for the Internet,” *IEICE Transactions on Communications*, Vol. E85-B, No. 1, pp. 3-13, January 2002. (Invited Paper)
 - [20] Keiichi Takagaki, Hiroyuki Ohsaki and Masayuki Murata, “Analysis of a Window-Based Flow Control Mechanism based on TCP Vegas in Heterogeneous Network Environment,” *IEICE Transactions on Communications*, Vol. E85-B, No. 1, pp. 89-97, January 2002.
 - [21] Hiroyuki Ohsaki, Masayuki Murata, “Steady State Analysis of the RED Gateway: Stability, Transient Behavior, and Parameter Setting,” *IEICE Transactions on Communications*, Vol. E85-B, No. 1, pp. 107-115, January 2002.
 - [22] Shingo Ata, Tetsuya Takine, Masayuki Murata, and Hideo Miyahara, “Performance Improvement of ABT Protocols with Combined Bandwidth/Buffer Reservation,” *Performance Evaluation*, Vol. 46, No. 4, pp. 255-274, November 2001.
 - [23] Ken-ichi Kitayama and Masayuki Murata, “Photonic Access Node using Optical Code-based Label Processing and its Applications to Optical Data Networking,” *IEEE/OSA Journal of Lightwave Technology*, Vol. 19, No. 10, pp. 1401-1415, October 2001.
 - [24] Masayuki Murata and Ken-ichi Kitayama, “A Perspective on Photonic Multi-protocol Label Switching,” *IEEE Network Magazine*, Vol. 15, No. 4, pp. 56-63, July/August 2001.
 - [25] Kouhei Fujimoto, Shingo Ata and Masayuki Murata, “Statistical Analysis of Packet Delays in the Internet and its Application to Playout Control for Streaming Applications,” *IEICE Transactions on Communications*, Vol. E84-B, No. 6 pp. 1504-1512, June 2001.
 - [26] Go Hasegawa and Masayuki Murata, “Survey on Fairness Issues in TCP Congestion Control Mechanisms,” *IEICE Transactions on Communications*, Vol. E84-B, No. 6, pp. 1461-1472, June 2001.
 - [27] Kazumine Matoba, Shingo Ata and Masayuki Murata, “Improving Accuracy of Bandwidth Estimation for Internet Links by Statistical Methods,” *IEICE Transactions on Communications*, Vol. E84-B, No. 6, pp. 1521-1531, June 2001.

- [28] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Comparison of VBR and CBR Service Classes for MPEG-2 Video Multiplexing - Is Statistical Multiplexing Really Useful for Bursty Video Transmission? -," *International Journal of Communication Systems*, Vol. 14, March 2001.
- [29] Atsushi Nagate, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "Impact of Limited Number of Wired Channels on Soft Handoff in CDMA Cellular Systems," *IEICE Transaction on Communications*, Vol. E84-B, No. 3, March 2001.
- [30] Doo Seop Eom, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "Performance Improvement by Packet Buffering in Mobile IP Based Networks," *IEICE Transactions on Communications*, Vol. E83-B, No. 11, pp. 2501-2512, November 2000.
- [31] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Fairness and Stability of Congestion Control Mechanisms of TCP," *Telecommunication Systems Journal*, pp. 167-184, November 2000.
- [32] Masayuki Murata, "Challenges for the Next Generation Internet and the Role of IP over Photonic Networks," *IEICE Transactions on Communications*, Vol. E83-B, No. 10, pp. 2153-2165, October 2000. (Invited Paper).
- [33] Kazuhiro Gokyu, Ken-ichi Baba and Masayuki Murata, "Path Accommodation Methods for Unidirectional Rings with Optical Compression TDM," *IEICE Transactions on Communications*, Vol. E83-B, No. 10, pp. 2294-2303, October 2000.
- [34] Shin'ichi Arakawa, Masayuki Murata, Hideo Miyahara, "Functional Partitioning for Multi-Layer Survivability in IP over WDM Networks," *IEICE Transactions on Communications*, pp. 2224-2233, No. 10, October 2000.
- [35] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "On Video Coding Algorithms with Application Level QoS Guarantees," *Computer Communication Journal*, Vol. 23, No. 14-15, pp. 1459-1470, August 2000.
- [36] Shingo Ata, Masayuki Murata and Hideo Miyahara, "Analysis of Network Traffic and its Application to Design of High-Speed Routers," *IEICE Transactions on Information and Systems*, Vol. E83-D, No. 5, pp. 988-995, May 2000.
- [37] Chikara Ohta, Tetsuya Takine and Masayuki Murata, "Bounded-Delay and Loss-Free Guarantees for Real-Time Video in Integrated Services Packet Networks," *International Journal of Communication Systems*, Vol. 13, No. 1, pp. 51-77, February 2000.
- [38] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Performance Evaluation of HTTP/TCP on Asymmetric Networks," *International Journal of Communication Systems*, Vol. 12, No. 4, pp. 281-296, July-August 1999.
- [39] Hiroaki Harai, Masayuki Murata and Hideo Miyahara, "Heuristic Algorithm of Allocation of Wavelength Convertible Nodes and Routing Coordination in All-Optical Networks," *IEEE Journal of Lightwave Technology*, Vol. 17, No. 4, pp. 535-545, April 1999.
- [40] Doo Seop Eom, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "Call Admission Control for QoS Provisioning in Multimedia Wireless ATM Networks," *IEICE Transactions on Communications*, Vol. E82-B, No. 1, pp. 14-23, January 1999.
- [41] Masahiko Nabe, Masayuki Murata and Hideo Miyahara, "Analysis and Modeling of World Wide Web Traffic for Capacity Dimensioning of Internet Access Lines," *Performance Evaluation*, Vol. 34, No. 4, pp. 249-271, December 1998.
- [42] Hiroaki Harai, Masayuki Murata and Hideo Miyahara, "Performance Analysis of Wavelength As-

- signment Policies in All-Optical Networks with Limited-Range Wavelength Conversion,” *IEEE Journal on Selected Areas in Communications*, Vol. 16, No. 7, pp. 1051-1060, September 1998.
- [43] Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, “Parameter Tuning of Rate-Based Congestion Control Algorithm for ABR Service Class in ATM Networks,” *International Journal of Communication Systems*, Vol. 11, No. 2, pp. 103-128, March-April 1998.
 - [44] Kentarou Fukuda, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, “Effective Algorithms for Multicast Video Transport to Meet Various QoS Requirements,” *IEICE Transactions on Communications*, Vol. E81-B, No. 8, pp. 1599-1607, August 1998.
 - [45] Doo Seop Eom, Masashi Sugano, Masayuki Murata and Hideo Miyahara, “A Combination Scheme of ARQ and FEC for Multimedia Wireless ATM Networks,” *IEICE Transactions on Communications*, Vol. E81-B, No. 5, pp. 1016-1024, May 1998.
 - [46] Shingo Ata, Tetsuya Takine, Masayuki Murata and Hideo Miyahara, “Performance Comparisons of ABT/IT and DT in ATM Networks,” *Journal of Operations Research Society of Japan*, Vol. 41, No. 1, pp. 35-52, March 1998.
 - [47] Masayuki Murata, “Requirements on ATM Switch Architectures for Quality-of-Service Guarantees,” *IEICE Transactions on Communications*, Vol. E81-B, No. 2, February 1998. (Invited Paper).
 - [48] Byunghan Ryu, Masayuki Murata and Hideo Miyahara, “A Dynamic Application-Oriented Multicast Routing for Virtual-Path Based ATM Networks,” *IEICE Transactions on Communications*, Vol. E80-B, No. 11, pp. 1654-1663, November 1997.
 - [49] Doo Seop Eom, Masayuki Murata and Hideo Miyahara, “Performance Comparisons of Approaches for Providing Connectionless Service over ATM Networks,” *IEICE Transactions on Communications*, Vol. E80-B, No. 10, pp. 1454-1465, October 1997.
 - [50] Go Hasegawa, Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, “Performance Improvement of TCP over EFCI-based ABR Service Class by Tuning of Congestion Control Parameters,” *IEICE Transactions on Communications*, Vol. E80-B, No. 10, pp. 1444-1453, October 1997.
 - [51] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, “MPEG over ATM DBR Service Class for High Quality Transmission and Effective Bandwidth Usage,” *International Journal of Communication Systems*, Vol. 10, No. 3, pp. 117-130, May-June 1997.
 - [52] Hiroyuki Ohsaki, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, “Performance of an Input/Output Buffered-Type ATM LAN Switch with Back-pressure Function,” *IEEE/ACM Transactions on Networking*, Vol. 5, No. 2, pp. 278-290, April 1997.
 - [53] Manabu Kato, Yuji Oie, Masayuki Murata and Hideo Miyahara, “Performance Analysis of Reactive Congestion Control based upon Queue Length Threshold Values,” *Performance Evaluation*, Vol. 29, pp.105-125, 1997.
 - [54] Hideyuki Shimonisi, Tetsuya Takine, Masayuki Murata and Hideo Miyahara, “Performance Analysis of Fast Reservation Protocols in ATM Networks with Arbitrary Topologies,” *Performance Evaluation*, Vol. 27&28, pp.41-69, October 1996.
 - [55] Hideyuki Shimonisi, Tetsuya Takine, Masayuki Murata and Hideo Miyahara, “Performance Analysis of Fast Reservation Protocol in ATM Networks,” *Performance Evaluation*, Vol. 26, No. 4, pp. 263-287, October 1996.
 - [56] Byunghan Ryu, Masayuki Murata and Hideo Miyahara, “Design Method for Highly Reliable Virtual Path Based ATM Networks,” *IEICE Transactions on Communications*, Vol. E79-B, No. 10, pp.

1500-1516, October 1996.

- [57] Go Hasegawa, Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Performance Evaluation and Parameter Tuning of TCP over ABR Service in ATM Networks," *IEICE Transactions on Communications*, Vol. E79-B, No. 5, pp. 668-683, May 1996.
- [58] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Fair Bandwidth Allocation in FRP-based ATM Local Area Networks," *IEICE Transactions on Communications*, Vol. E79-B, No. 5, pp. 627-638, May 1996.
- [59] Yuji Oie, Kenji Kawahara, Masayuki Murata and Hideo Miyahara, "Performance Analysis of Internally Unbuffered Large Scale ATM Switch with Bursty Traffic," *IEICE Transactions on Communications*, Vol. E79-B, No. 3, pp. 412-423, March 1996.
- [60] Byunghan Ryu, Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Design Algorithm for Virtual Path based ATM Networks," *IEICE Transactions on Communications*, Vol. E79-B, No. 2, February 1996.
- [61] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Performance Analysis of Traffic Control Methods of Mixed Traffic Classes in ATM LAN," *International Journal of Communication Systems*, Vol. 9, pp.23-34, January-February 1996.
- [62] Dirceu Cavendish, Yuji Oie, Masayuki Murata and Hideo Miyahara, "Proportional Rate-Based Congestion Control under Long Propagation Delay," *International Journal of Communication Systems*, Vol. 8, pp.79-89, 1995.
- [63] Kenji Kawahara, Yuji Oie, Masayuki Murata and Hideo Miyahara, "Performance Analysis of Reactive Congestion Control for ATM Networks," *IEEE Journal on Selected Areas in Communications*, Vol. 13, No. 4, pp. 651-661, May 1995.
- [64] Hiroyuki Ohsaki, Masayuki Murata, Hiroshi Suzuki, Chinatsu Ikeda and Hideo Miyahara, "Rate-Based Congestion Control for ATM Networks," *ACM SIGCOMM Computer Communication Review*, Vol. 25, No. 2, pp. 60-72, April 1995.
- [65] Ken-ichi Baba, Masayuki Murata and Hideo Miyahara, "Performance Analysis for the Dynamic Virtual Path Bandwidth Control Method in ATM Networks," *International Journal of Communication Systems*, Vol. 7, pp.283-294, 1994.
- [66] Yoshihiro Ohba, Masayuki Murata and Hideo Miyahara, "Analysis of Dynamic Bandwidth Control for LAN Interconnection through ATM Networks," *IEICE Transactions on Communications*, Vol. E77-B, No. 3, pp. 367-377, March 1994.
- [67] Masayuki Murata and Hideo Miyahara, "LAN Internetworking through Broadband ISDN," *IEICE Transactions on Communications*, Vol. E77-B, No. 3, pp. 294-305, March 1994. (Invited Paper).
- [68] Changhuan Oh, Masayuki Murata and Hideo Miyahara, "Circuit Emulation Technique in ATM Networks," *IEICE Transactions on Communications*, Vol. E76-B, No. 6, pp. 646-657, June 1993.
- [69] Hiroshi Inai, Manabu Kato, Yuji Oie, Masayuki Murata and Hideo Miyahara, "Transient Analysis of Packet Transmission Rate Control to Release Congestion in High Speed Networks," *IEICE Transactions on Communications*, Vol. E75-B, No. 12, pp. 1354-1366, December 1992.
- [70] Hiroshi Inai, Masayuki Murata and Hideo Miyahara, "Rate-Based Congestion Control in High Speed Packet-Switching Networks," *IEICE Transactions on Communications*, Vol. E75-B, No. 11, pp. 1199-1207, November 1992.
- [71] Changhuan Oh, Masayuki Murata and Hideo Miyahara, "Priority Control for ATM Switching Sys-

- tems,” *IEICE Transactions on Communications*, Vol. E75-B, No. 9, pp. 894-905, September 1992.
- [72] Yuji Oie, Masayuki Murata, Koji Kubota and Hideo Miyahara, “Performance Analysis of Non-blocking Packet Switch with Input/Output Buffers,” *IEEE Transactions on Communications*, Vol. 40, No. 8, pp. 1294-1297, August 1992.
 - [73] Yoshihiro Ohba, Masayuki Murata and Hideo Miyahara, “Analysis of Flow Enforcement Algorithm for Bursty Traffic in ATM Networks,” *Asia-Pacific Engineering Journal*, Vol. 2, No. 2, pp. 247-268, June 1992.
 - [74] Masayuki Murata and Hideaki Takagi, “Performance of Token Ring Networks with a Finite Capacity Bridge,” *Computer Networks and ISDN Systems -The International Journal of Computer and Telecommunications Networking-*, Vol. 24, No. 1, pp. 45-64, March 1992.
 - [75] Masayuki Murata and Hideo Miyahara, “An Analytic Solution of the Waiting Time Distribution for the GI/G/1 Queue,” *Performance Evaluation -An International Journal-*, Vol. 13, No. 2, pp. 87-95, October 1991.
 - [76] Yuji Oie, Tatsuya Suda, Masayuki Murata and Hideo Miyahara, “Survey of Switching Techniques in High-Speed Networks and Their Performance,” *International Journal of Satellite Communications*, Vol. 9, No. 5, pp. 285-303, September-October 1991.
 - [77] Yoshihiro Ohba, Masayuki Murata and Hideo Miyahara, “Analysis of Interdeparture Times for Bursty Traffic in ATM Networks,” *IEEE Journal on Selected Areas in Communications*, Vol. 9, No. 3, pp. 468-476, April 1991.
 - [78] Masayuki Murata, Kohei Shiimoto and Hideo Miyahara, “Performance Analysis of Token Ring Networks with Reservation Priority Disciplines,” *IEEE Transactions on Communications*, Vol. 38, No. 10, pp. 1844-1853, October 1990.
 - [79] Masayuki Murata, Yuji Oie, Tatsuya Suda and Hideo Miyahara, “Analysis of a Discrete-Time Single-Server Queue with Bursty Inputs for Traffic Control in ATM Networks,” *IEEE Journal on Selected Areas in Communications*, Vol. 8, No. 3, pp. 447-458, April 1990.
 - [80] Masayuki Murata and Hideaki Takagi, “Two-Layer Modeling for Local Area Networks,” *IEEE Transactions on Communications*, Vol. 36, No. 9, pp. 1022-1034, September 1988.
 - [81] Hideaki Takagi and Masayuki Murata, “Output Processes of Slotted Persistent CSMA and CSMA/CD Systems,” *Computer Networks and ISDN Systems -The International Journal of Computer and Telecommunications Networking-*, Vol. 13, No. 4&5, pp. 333-346, September 1987.
 - [82] Takeshi Nishida, Masayuki Murata, Hideo Miyahara and Kensuke Takashima, “An Approximate Analysis of a Prioritized Token Passing Method in Ring-Shaped Local Area Networks,” *The Transactions of the Institute of Electronics and Communication Engineers of Japan*, Vol. E69, No. 1, pp. 29-39, January 1986.
 - [83] Takeshi Nishida, Masayuki Murata, Hideo Miyahara and Kensuke Takashima, “Congestion Control in Interconnected Local Area Networks,” in *Local Area & Multiple Access Networks* (R. L. Pickholtz, ed.), Ch. 6, pp. 107-136, Computer Science Press, January 1986.

1.2. 和文学術論文

- [1] 幸 太一, 山本 貴之, 菅野 正嗣, 村田 正幸, 宮原 秀夫, 畠内 孝明, “アドホックネットワークにおける TCP 性能向上に関する一考察,” *電子情報通信学会論文誌*, Vol. J85-B, No. 12,

- pp. 2045-2053, December 2002.
- [2] 三好 昌弘, 菅野 正嗣, 村田 正幸, “ワイヤレスセルラーネットワークにおける下位層プロトコルの影響を考慮した TCP スループットの性能評価,” 電子情報通信学会論文誌, Vol. J85-B, No. 5, pp. 732-743, May 2002.
 - [3] 久保 聖治, 潮 俊光, 村田 正幸, 大崎 博之, “伝搬遅延時間を考慮した ATM の PID 型ふくそう制御” 電子情報通信学会論文誌, Vol. J85-B, No. 3, pp. 371-380, March 2002.
 - [4] 渡辺 啓, 村田 正幸, 宮原 秀夫, “ユーザ効用によるネットワークサービスの比較評価,” 電子情報通信学会論文誌, pp.514-522, Vol. J84-B, No.3, March 2001.
 - [5] 宮本健太郎, 原井洋明, 村田正幸, 宮原秀夫, “波長変換に制限のある光交換ネットワークの性能評価—リンクに複数のファイバがある場合—,” 電子情報通信学会論文誌, pp. 1125-1134, Vol. J83-B, No. 8, August 2000.
 - [6] 渡辺 啓, 滝根 哲哉, 村田 正幸, 宮原 秀夫, “ベストエフォート型サービス/資源予約型サービスにおけるユーザ効用の比較,” 電子情報通信学会論文誌, Vol. J83-B, No. 6, pp. 789-799, June 2000.
 - [7] 荒川 伸一, 宮本 健太郎, 村田 正幸, 宮原 秀夫, “フォトリックネットワークにおける高速データ転送のための波長割当方式の性能解析,” 電子情報通信学会論文誌, Vol. J83-B, No. 4, pp. 424-433, April 2000.
 - [8] 長谷川 剛, 大崎 博之, 村田 正幸, 宮原 秀夫, “誤再送を考慮した TCP の輻輳制御方式 / エラー回復方式の改善,” 電子情報通信学会論文誌 (B-I), Vol. J82-B, No. 11, pp. 2074-2084, November 1999.
 - [9] 長谷川 剛, 村田 正幸, 宮原 秀夫, “TCP の公平性と安定性に関する一検討,” 電子情報通信学会論文誌 (B-I), Vol. J82-B, No. 9, pp. 1646-1654, September 1999.
 - [10] 藤田 靖征, 村田 正幸, 宮原 秀夫, “プロキシサーバにおけるキャッシュ機能を考慮した Web システムのモデル化と性能評価,” 電子情報通信学会論文誌, Vol. 82-B, No. 8, pp. 1449-1462, August 1999.
 - [11] 住田 義明, 大崎 博之, 村田 正幸, 宮原 秀夫, “上位層プロトコルがネットワークトラヒックの自己相似性に与える影響,” 電子情報通信学会論文誌, Vol. 82-B, No. 6, pp. 1126-1137, June 1999.
 - [12] 阿多 信吾, 村田 正幸, 宮原 秀夫, “トランスポート層を考慮した ABT の性能評価,” 電子情報通信学会論文誌 掲載予定, Vol. 82-B, No. 5, pp. 951-959, May 1999.
 - [13] 渡辺 啓, 馬場 健一, 村田 正幸, 宮原 秀夫, “ユーザ QoS を考慮した動的帯域管理方式の性能評価,” 電子情報通信学会論文誌 (B-I), Vol. 82-B, No. 4, pp. 549-559, April 1999.
 - [14] 福田 健太郎, 若宮 直紀, 村田 正幸, 宮原 秀夫, “帯域予約型ネットワークに適した MPEG-2 動画像における品質と帯域の関係,” 電子情報通信学会論文誌, Vol. J82-B, No. 3, pp. 358-367, March 1999.
 - [15] 藤田 靖征, 村田 正幸, 宮原 秀夫, “Web サーバシステムのモデル化と性能評価,” 電子情報通信学会論文誌(B-I), Vol. J82-B, No. 3, pp. 347-357, March 1999.
 - [16] 名部 正彦, 村田 正幸, 宮原 秀夫, “キャッシングを考慮した WWW トラヒック特性の分析とモデル化,” 電子情報通信学会論文誌, Vol. J81-B-I, No. 5, pp. 325-334, May 1998.
 - [17] 名部 正彦, 馬場 健一, 村田 正幸, 宮原 秀夫, “インターネット・アクセスネットワーク設計のための WWW トラヒックの分析とモデル化,” 電子情報通信学会論文誌, Vol. J80-B-1, No. 6, pp. 428-437, June 1997.
 - [18] 福田 健太郎, 若宮 直紀, 村田 正幸, 宮原 秀夫, “帯域再交渉を考慮した ATM DBR サービス

- 上での MPEG-2 動画像転送におけるレート制御,” 電子情報通信学会論文誌, Vol. J80-B-1, No. 6, pp. 398-407, June 1997.
- [19] 馬場 健一, 村田 正幸, 宮原 秀夫, 中村 克之, “トラヒックパラメータ再交渉に基づく動的帯域管理方式の性能評価,” 電子情報通信学会論文誌, Vol. J80-B-1, No. 6, pp. 387-397, June 1997.
- [20] 村田 正幸, “マルチメディアネットワークにおける通信品質保証の実現と課題,” 電子情報通信学会論文誌, Vol. J80-B-1, No. 6, pp. 296-304, June 1997. (Invited Paper).
- [21] 原井 洋明, 村田 正幸, 宮原 秀夫, “光交換ネットワークにおけるルーチング方式の性能評価,” 電子情報通信学会論文誌, Vol. J80-B-1, No. 2, pp. 74-86, February 1997.
- [22] 原井 洋明, 村田 正幸, 宮原 秀夫, “波長帯域を複数有する光交換ネットワークにおけるマルチキャスト通信方式の性能評価,” 電子情報通信学会論文誌, Vol. J80-B-I, No. 1, pp. 23-34, January 1997.
- [23] 川原 憲治, 尾家 裕二, 村田 正幸, 宮原 秀夫, “バックプレッシャ輻輳制御方式の基本特性の解析,” 電子情報通信学会論文誌, Vol. J78-B-1, No. 12, pp. 837-845, December 1995.
- [24] 原井 洋明, 村田 正幸, 宮原 秀夫, “光交換ネットワークにおけるマルチキャストルーティング方式の提案とその評価,” 電子情報通信学会論文誌, Vol. J78-B-I, No. 9, pp. 399-408, September 1995.
- [25] 若宮 直紀, 村田 正幸, 宮原 秀夫, 池田千夏, “ATM LAN におけるリンク情報を用いた動的帯域予約方式の性能評価,” 電子情報通信学会論文誌, Vol. J78-B-I, No. 9, pp. 381-388, September 1995.
- [26] 村田 正幸, 菊地 泰敏, 宮原 秀夫, “マルチメディア環境における FEC 方式を用いた高速データ転送の性能評価,” 電子情報通信学会論文誌, Vol. J78-B-I, No. 8, pp. 325-334, August 1995.
- [27] 大崎 博之, 若宮 直紀, 村田 正幸, 宮原 秀夫, “バックプレッシャ機能を有する ATM LAN スイッチの性能評価 - 最大スループット解析 -,” 電子情報通信学会論文誌, Vol. J78-B-I, No. 4, pp. 179-188, April 1995.
- [28] 若宮直紀, 馬場健一, 村田正幸, 宮原秀夫, “ATM 網におけるバースト帯域予約方式による高速データ転送の性能評価,” 電子情報通信学会論文誌, Vol. J76-B-I, No. 11, pp. 849-859, November 1993.
- [29] 菅野正嗣, 村田正幸, 宮原秀夫, “異なる要求品質を持つトラヒックの混在するパケット交換ネットワークの回線容量割当法,” 電子情報通信学会論文誌, Vol. J76-B-I, No. 8, pp. 581-589, August 1993.
- [30] 坂本伸夫, 大場義洋, 村田正幸, 宮原秀夫, “タギング方式を用いた Usage Parameter Control,” 電子情報通信学会論文誌, Vol. J76-B-I, No. 7, pp. 474-484, July 1993.
- [31] 馬場健一, 齊藤敏彦, 村田正幸, 宮原秀夫, “マルチメディア環境を考慮した ATM 網におけるファイル転送の性能評価,” 電子情報通信学会論文誌, Vol. J76-B-I, No. 3, pp. 239-252, March 1993.
- [32] 馬場健一, 齊藤敏彦, 村田正幸, 宮原秀夫, “ATM 網におけるマルチチャネルを考慮した帯域管理方式の比較評価,” 電子情報通信学会論文誌, Vol. J76-B-I, No. 3, pp. 231-238, March 1993.
- [33] 馬場健一, 齊藤敏彦, 村田正幸, 宮原秀夫, “階層化モデルによるセル優先伝送処理を考慮した ATM 網の多重化効果,” 電子情報通信学会論文誌, Vol. J76-B-I, No. 3, pp. 219-230, March 1993.
- [34] 坂本伸夫, 大場義洋, 村田正幸, 宮原秀夫, “ATM 網における入力トラヒック監視制御方式の評価,” 電子情報通信学会論文誌, Vol. J75-B-I, No. 8, pp. 499-508, August 1992.

- [35] 馬場健一, 村田正幸, 宮原秀夫, “ATM 網におけるデータトラフィックの End-to-End の性能評価,” 電子情報通信学会論文誌, Vol. J75-B-I, No. 6, pp. 383-392, June 1992.
- [36] 稲井寛, 村田正幸, 宮原秀夫, “パケット交換網におけるパケット分割を考慮したメッセージ転送遅延の性能解析,” 電子情報通信学会論文誌, Vol. J74-B-I, No. 12, pp. 987-996, December 1991.
- [37] 稲井寛, 横平徳美, 村田正幸, 宮原秀夫, “パケット交換網における伝送遅延による再送を考慮にいた性能評価,” 電子情報通信学会論文誌, Vol. J74-B-I, No. 4, pp. 275-282, April 1991.
- [38] 大和克巳, 村田正幸, 西田竹志, 西尾章治郎, 宮原秀夫, “高信頼性を有する光ファイバ網の設計手法,” 電子情報通信学会論文誌, Vol. J74-B-I, No. 4, pp. 283-294, April 1991.
- [39] 久保田幸司, 村田正幸, 尾家祐二, 宮原秀夫, “画像トラフィックのバースト性を考慮した ATM 網における輻輳制御,” 電子情報通信学会論文誌, Vol. J74-B-I, No. 2, pp. 97-106, February 1991.
- [40] 稲井寛, 横平徳美, 村田正幸, 宮原秀夫, “階層型通信プロトコルの性能評価,” 電子情報通信学会論文誌, Vol. J73-B-I, No. 5, pp. 505-515, May 1990.
- [41] 塩本公平, 村田正幸, 尾家祐二, 宮原秀夫, “衝突セル飛び越し機能を持つバンヤン網型 ATM 交換機の性能評価,” 電子情報通信学会論文誌, Vol. J72-B-I, No. 11, pp. 1044-1054, November 1989.
- [42] 村田正幸, 尾家祐二, 宮原秀夫, “トラフィック理論からみた ATM 網のトラフィック制御の動向,” 電子情報通信学会論文誌, Vol. J72-B-I, No. 11, pp. 979-990, November 1989.
- [43] 稲井寛, 稲井三重, 横平徳美, 村田正幸, 宮原秀夫, “大規模計算機システムの性能評価手法とその適用例,” 電子情報通信学会論文誌, Vol. J72-A, No. 7, pp. 1052-1061, July 1989.

1.3. 国際会議発表論文

- [1] Yukinobu Fukushima, Hiroaki Harai, Shin'ichi Arakawa, and Masayuki Murata, “Planning method of robust WDM networks against traffic changes,” in *Proceedings of The 8th Working Conference on Optical Network Design and Modeling (ONDM 2004)*, pp. 695-714, February 2004.
- [2] Naoki Wakamiya and Masayuki Murata, “Scalable and robust scheme for data fusion in sensor networks,” in *Proceedings of the First International Workshop on Biologically Inspired Approaches to Advanced Information Technology*, (Lausanne), pp. 305-314, January 2004.
- [3] Masahiro Sasabe, Naoki Wakamiya, Masayuki Murata, and Hideo Miyahara, “Media streaming on P2P networks with bio-inspired cache replacement algorithm,” in *Proceedings of The First International Workshop on Biologically Inspired Approaches to Advanced Information Technology (Bio-ADIT2004)*, (Lausanne), pp. 80-95, January 2004.
- [4] Jiangang Shi, Naoki Wakamiya, Masayuki Murata, and Hideo Miyahara, “Active Load Distribution Mechanism for P2P Application,” in *Proceedings of 5th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT 2003)*, pp. 235-240, November 2003.
- [5] Taichi Yuki, Takayuki Yamamoto, Masashi Sugano, Masayuki Murata, Hideo Miyahara, and Takaaki Hatauchi, “Performance Improvement of TCP over an Ad Hoc Network by Combining of Data and ACK Packets,” in *Proceedings of The 5th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT 2003)*, pp. 339-344, November 2003.
- [6] Go Hasegawa, Haruki Tojo and Masayuki Murata, “Realizing a Network Emulator System with

- Intel IXP1200 Network Processor,” in *Proceedings of 5th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT 2003)*, pp.97-102, November 2003.
- [7] Yoshiaki Taniguchi, Atsushi Ueoka, Naoki Wakamiya, Masayuki Murata, and Fumio Noda, “Implementation and Evaluation of Proxy Caching System for MPEG-4 Video Streaming with Quality Adjustment Mechanism,” in *Proceedings of The 5th AEARU Workshop on Web Technology*, pp. 27-34, October 2003.
 - [8] Masashi Sugano, Liwei Kou, Takayuki Yamamoto, and Masayuki Murata, “Impact of Soft Handoff on TCP Throughput over CDMA Wireless Cellular Networks,” *IEEE Vehicular Technology Conference 2003 Fall (VTC2003 Fall)*, October 2003.
 - [9] Kanitani, Y., Shin'ichi Arakawa, Masayuki Murata, Ken-ichi Kitayama, “High speed data transfer using optical code processing in WDM networks,” in *Proceedings of International Conference on Optical Communications and Networks*, October 2003.
 - [10] Go Yoshida, Naoki Wakamiya, and Masayuki Murata, “Dynamic Organization of Active Video Multicast in Heterogeneous Environment,” in *Proceedings of the 9th Asia-Pacific Conference on Communication (APCC 2003)*, vol. 2, pp. 150-156, September 2003.
 - [11] Ken-ichi Baba, Takashi Yamaguchi, Masayuki Murata, and Ken-ichi Kitayama, “Considerations on packet scheduling algorithms for photonic packet switch with WDM-FDL buffers,” in *Proceedings of ECOC 2003*, Vol.2, No.Mo4.4.3, September 2003.
 - [12] Cao Le Thanh Man, Go Hasegawa and Masayuki Murata, “A New Available Bandwidth Measurement Technique for Service Overlay Networks,” in *Proceedings of 6th IFIP/IEEE International Conference on Management of Multimedia Networks and Services Conference (MMNS2003)*, pp. 436-448, September 2003.
 - [13] Masahiro Sasabe, Naoki Wakamiya, Masayuki Murata, and Hideo Miyahara, “Scalable and Continuous Media Streaming on Peer-to-Peer Networks,” in *Proceedings of Third International Conference on Peer-to-Peer Computing (P2P2003)*, pp. 92-99, September 2003.
 - [14] Hiroyuki Hisamatu, Hiroyuki Ohsaki, and Masayuki Murata, “Modeling a heterogeneous network with TCP connections using fluid flow approximation and queuing theory,” in *Proceedings of SPIE's International Symposium on the Convergence of Information Technologies and Communications (ITCom 2003)*, pp. 893--901, September 2003.
 - [15] Shingo Ata, Yoshihiro Gotoh, and Masayuki Murata, “Replication Strategies in Peer-to-Peer Services over Power-law Overlay Networks,” in *Proceedings of The 7th Asia-Pacific Network Operations and Management Symposium (APNOMS 2003)*, September 2003.
 - [16] Shingo Ata, Masayuki Murata, and Yoshihiro Gotoh, “Replication methods for enhancing search performance in peer-to-peer services on power-law logical networks,” in *Proceedings of SPIE Performance and Control of Next-Generation Communications Networks*, vol. 5244, pp. 76--85, August 2003.
 - [17] Satoshi Doi, Shingo Ata, Hiroshi Kitamura, Masayuki Murata and Hideo Miyahara, “Protocol Design for Anycast Communication in IPv6 Network,” in *Proceedings of 2003 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing (PACRIM '03)*, pp.470-473, August 2003.
 - [18] Ichinoshin Maki, Hideyuki Shimonishi, Tutomu Murase, Masayuki Murata and Hideo Miyahara, “Hierarchically aggregated fair queuing (HAFQ) for per-flow fair bandwidth allocation in high

- speed networks,” in *Proceedings of International Conference of Communications (ICC) 2003*, (Anchorage) May 2003.
- [19] Masashi Sugano, and Masayuki Murata, “Performance Improvement of TCP on a Wireless Ad Hoc Network,” in *Proceedings of IEEE Vehicular Technology Conference, 2003 Spring (VTC2003 Spring)*, April 2003.
 - [20] Takayuki Yamamoto, Masashi Sugano and Masayuki Murata, “Routing in ad hoc networks for processing many short-lived TCP connections,” in *Proceedings of ANWIRE 1st International Workshop on “Wireless, Mobile & Always Best Connected,”* (Glasgow), April 2003.
 - [21] Koichi Tokuda, Go Hasegawa and Masayuki Murata, “Performance analysis of HighSpeed TCP and its improvement for high throughput and fairness against TCP Reno connections,” in *Proceedings of IEEE High Speed Network Workshop 2003 (HSN '03)*, (San Francisco), March 2003.
 - [22] Masayuki Murata, “Establishment of Networked Symbiosis Environment (NSE) Architecture,” *First Symposium on New Information Technologies for Building a Networked Symbiosis Environment*, March 2003.
 - [23] Go Hasegawa and Masayuki Murata, “NWP Design Lab. for Experiencing Network Processors,” *First Symposium on New Information Technologies for Building a Networked Symbiosis Environment*, March 2003.
 - [24] Takayuki Yamamoto, Masashi Sugano, and Masayuki Murata, “Routing in Ad Hoc Networks for Processing Many Short-lived TCP Connections,” in *Proceedings of ANWIRE 1st International Workshop*, February 2003.
 - [25] Yoshihiro Gotoh, Shingo Ata and Masayuki Murata, “Replication methods for enhancing search performance in peer-to-peer services on power-law logical networks,” in *Proceedings of IT-Com 2003*, February 2003.
 - [26] Shin'ichi Arakawa, Masayuki Murata and Ken-ichi Kitayama, “One-way reservation scheme using optical code processing for fast data transfer in WDM networks,” in *Proceedings of The 7th IFIP Working Conference on Optical Network Design and Modeling (ONDM 2003)*, (Budapest), pp. 1073-1088, February 2003.
 - [27] Shinya Ishida, Shin'ichi Arakawa and Masayuki Murata, “Dynamic reconfiguration of logical topologies in WDM-based mesh networks,” in *Proceedings of The 7th IFIP Working Conference on Optical Network Design and Modeling (ONDM 2003)*, (Budapest), pp. 93-112, February 2003.
 - [28] Hiroaki Harai and Masayuki Murata, “Photonic Buffer Architecture to Support Prioritized Buffer Management for Asynchronously Arriving Variable-Length Packets,” in *Proceedings of The 7th IFIP Working Conference on Optical Network Design and Modeling (ONDM 2003)*, (Budapest), pp. 93-112, February 2003.
 - [29] Naoki Wakamiya, Masaki Miyabayashi, Masayuki Murata and Hideo Miyahara, “MPEG-4 video transfer with TCP-friendly rate control,” in *Proceedings of The 2nd International Workshop on QoS in Multiservice IP Networks (QoS-IP 2003)*, (Milan), February 2003.
 - [30] Cao Le Thanh Man, Go Hasegawa and Masayuki Murata, “Inline network measurement mechanism for service overlay networks,” in *Proceedings of IEEE Bandwidth Management Workshop X*, (Ontario), January 2003.
 - [31] Tomoya Eguchi, Hiroyuki Ohsaki and Masayuki Murata, “On control parameters tuning for active queue management mechanisms using multivariate analysis,” in *Proceedings of International Sym-*

- posium on Applications and the Internet (SAINT-2003)*, pp. 120-127, January 2003.
- [32] Hiroyuki Hisamatu, Hiroyuki Ohsaki and Masayuki Murata, "Steady state and transient behavior analyses of TCP connections considering interactions between TCP connections and network," in *Proceedings of International Symposium on Applications and the Internet (SAINT-2003)*, pp. 309-316, January 2003.
 - [33] Kouhei Fujimoto, Shingo Ata, and Masayuki Murata, "Adaptive Playout Buffer Algorithm for Enhancing Perceived Quality of Streaming Applications," *Internet Performance Symposium (IPS 2002)*, November 2002.
 - [34] Naoki Wakamiya, Taketo Yamashita, Masayuki Murata and Hideo Miyahara, "Integrated Resource Allocation Scheme for Real-Time Video Multicast," in *Proceedings of IEEE GLOBECOM 2002*, (Taipei), November 2002.
 - [35] Go Hasegawa and Masayuki Murata, "Postgraduate Coursework Program using Network Processors at Osaka University," *The 1st AEARU Network Education Workshop (Invited)*, November 2002.
 - [36] Shinya Ishida, Shin'ichi Arakawa and Masayuki Murata, "Proposal of procedures to reconfigure logical topologies in reliable WDM-based mesh networks," in *Proceedings of SPIE APOC 2002*, pp.115-125, October 2002.
 - [37] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "On proxy-Caching Mechanisms for Cooperative Video Streaming in Heterogeneous Environments," in *Proceedings of IFIP/IEEE International Conference on Management of Multimedia Networks and Services (MMNS 2002)*, Santa Barbara ,pp127-139,October2002.
 - [38] Tatsuya Yamada, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Implementation and evaluation of video-quality adjustment for heterogeneous video multicast," in *Proceedings of The 8th Asia-Pacific Conference on Communications (APCC 2002)*, (Bandung), pp. 454-457, September 2002.
 - [39] Motohisa Kishimoto, Hiroyuki Ohsaki and Masayuki Murata, "On transient behavior analysis of random early detection gateway using a control theoretic approach," in *Proceedings of the IEEE Control System Society Conference on Control Applications (CCA/CACSD 2002)*, pp.1144-1149, September 2002.
 - [40] Ken-ichi Baba, Masayuki Murata and Ken-ichi Kitayama, "A Packet Scheduling Algorithm for the 2x2 Photonic Packet Switch with FDL Buffers," in *Proceedings of 28th European Conference on Optical Communication (ECOC 2002)*, September 2002.
 - [41] Yukinobu Fukushima, Hiroaki Harai, Shin'ichi Arakawa, Masayuki Murata and Hideo Miyahara, "A Minimum Interference Routing Algorithm for Multi-period Planning of WDM Lightpath Networks without Traffic Prediction," in *Proceedings of 28th European Conference on Optical Communication (ECOC 2002)*, September 2002.
 - [42] Ken-ichi Kitayama, Shin'ichi Arakawa and Masayuki Murata, "Ultrafast optical-domain path setup for optical burst switching using optical-code based header processing," in *Proceedings of 28th European Conference on Communication 2002 (ECOC2002) Technical Digest*, September 2002.
 - [43] Takashi Yamaguchi, Ken-ichi Baba, Masayuki Murata and Ken-ichi Kitayama, "Packet scheduling for WDM fiber delay line buffers in photonic packet switches," in *Proceedings of Opticomm 2002*, July-August 2002.

- [44] Hiroaki Harai and Masayuki Murata, "Performance analysis of prioritized buffer management in photonic packet switches for DiffServ assured service," in *Proceedings of Opticomm 2002*, July-August 2002.
- [45] Mitsushige Morita, Hiroyuki Ohsaki and Masayuki Murata, "Designing a delay-based adaptive congestion control mechanism using control theory and system identification for TCP/IP networks," in *Proceedings of SPIE International Symposium ITCOM 2002*, Boston, July-August 2002.
- [46] Tomoya Eguchi, Hiroyuki Ohsaki and Masayuki Murata, "Multivariate analysis for performance comparison of active queue management mechanisms in the internet," in *Proceedings of SPIE International Symposium ITCOM 2002*, Boston, pp.144-153, July-August 2002.
- [47] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Video streaming systems with cooperative caching mechanisms," in *Proceedings of SPIE International Symposium ITCOM*, (Boston), July-August 2002.
- [48] Ken-ichi Kitayama, Shin'ichi Arakawa, Ikutaro Ogushi and Masayuki Murata, "Ultrafast Optical-Code based Path Setup for Optical Burst Switching," in *Proceedings of IEEE Lasers and Electro-Optics Society Workshop*, July 2002.
- [49] Masahiro Sasabe, Yoshiaki Taniguchi, Naoki Wakamiya, Masayuki Murata, Hideo Miyahara, "Implementation and Evaluation of Proxy Caching Mechanisms with Video Quality Adjustment," in *Proceedings of The 2002 International Technical Conference On Circuits/Systems, Computers and Communications (ITC-CSCC 2002)*, pp. 121-124, Thailand, July 16-19, 2002.
- [50] Go Hasegawa and Masayuki Murata, "Research and Educational Activities using IXP1200 at Osaka University," in *Proceedings of IXA University Program Workshop* (Invited), June 2002.
- [51] Go Hasegawa, Kouichi Tokuda and Masayuki Murata, "Analysis and Improvement of Fairness among Many TCP Connections Sharing Tail-Drop and RED Routers," in *Proceedings of INET 2002*, June 2002.
- [52] Masayuki Murata and Ken-ichi Kitayama, "Ultrafast photonic label switch for asynchronous packets of variable length," in *Proceedings of IEEE INFOCOM 2002*, June 2002.
- [53] Ryo Kawabe, Shingo Ata and Masayuki Murata, "Performance prediction method for IP lookup algorithms," in *Proceedings of 2002 Workshop on High Performance Switching and Routing (HPSR)*, May 2002.
- [54] Takuya Okamoto, Tatsuhiko Terai, Go Hasegawa and Masayuki Murata, "A resource/connection management scheme for HTTP proxy servers," in *Proceedings of the Second IFIP-TC6 Networking Conference (Networking 2002)*, May 2002.
- [55] Hiroyuki Ohsaki, Mitsushige Morita and Masayuki Murata, "Measurement-Based Modeling of Internet Round-Trip Time Dynamics using System Identification," in *Proceedings of the Second IFIP-TC6 Networking Conference (Networking 2002)*, May 2002.
- [56] Koichi Tokuda, Go Hasegawa and Masayuki Murata, "Analysis and improvement of the fairness between long-lived and short-lived TCP connections," in *Proceedings of Seventh International Workshop on Protocols for High Speed Networks (PfHSN 2002)*, May 2002.
- [57] Masahiro Miyoshi, Masashi Sugano and Masayuki Murata, "Performance improvement of TCP on wireless cellular networks by adaptive FEC combined with explicit loss notification," in *Proceedings of IEEE Vehicular Technology Conference 2002 Spring*, May 2002.

- [58] Takayuki Yamamoto, Masashi Sugano, Masayuki Murata “Low latency routing for short-lived TCP connections in wireless ad hoc networks,” in *Proceedings of IEEE Workshop on Communications Quality & Reliability*, May 2002.
- [59] Koichi Tokuda, Go Hasegawa and Masayuki Murata, “TCP throughput analysis with variable packet loss probability for improving fairness among long/short-lived TCP connections,” in *Proceedings of IEEE Workshop on Communications Quality & Reliability*, May 2002.
- [60] Hideyuki Shimonishi, Ichinoshin Maki, Tsutomu Murase and Masayuki Murata, “Dynamic fair bandwidth allocation for diffserv classes,” in *Proceedings of IEEE International Conference on Communications 2002 (ICC 2002)*, April 2002.
- [61] Ryo Kawabe, Shingo Ata and Masayuki Murata, “On performance prediction of address lookup algorithms of IP routers through simulation and analysis techniques,” in *Proceedings of IEEE International Conference on Communications 2002 (ICC 2002)*, April 2002.
- [62] Naoki Wakamiya, Hector Akamine, Masayuki Murata and Hideo Miyahara, “Active Video Multicast in a Heterogeneous Environment,” in *Proceedings of The First International Workshop on Active Network Technologies and Applications (ANTA2002)*, Tokyo pp. 89-94, March 2002. (Invited Talk)
- [63] Yukinobu Fukushima, Shin’ichi Arakawa, Masayuki Murata and Hideo Miyahara, “A design method for logical topologies with consideration of wavebands,” in *Proceedings of The Sixth Working Conference on Optical Network Design and Modeling (ONDM 2002)*, (Torino), February 2002.
- [64] Hiroaki Harai and Masayuki Murata, “Prioritized buffer management in photonic packet switches for DiffServ assured forwarding,” in *Proceedings of The Sixth Working Conference on Optical Network Design and Modeling (ONDM 2002)*, (Torino), February 2002.
- [65] Ken-ichi Kitayama, Kiyoshi Onohara and Masayuki Murata, “Capability of optical code-based MPLS (OC-MPLS),” in *Proceedings of The Sixth Working Conference on Optical Network Design and Modeling (ONDM 2002)*, (Torino), February 2002.
- [66] Ryo Kawabe, Shingo Ata and Masayuki Murata, “Performance prediction methods for address lookup algorithms of IP routers,” in *Proceedings of the 16th International Conference on Information Networking (ICOIN-16)*, pp. 6B-3.1-6B-3.11, January 2002.
- [67] Takayuki Yamamoto, Masashi Sugano, Masayuki Murata, Takaaki Hatauchi and Yohei Hosooka, “Performance evaluation and improvement of an ad hoc wireless network,” in *Proceedings of the 16th International Conference on Information Networking (ICOIN-16)*, pp. 10A-2.1-10A2.12, January 2002.
- [68] Motohisa Kishimoto, Hiroyuki Ohsaki and Masayuki Murata, “Analyzing the impact of TCP connections variation on transient behavior of RED gateway,” in *Proceedings of the 16th International Conference on Information Networking (ICOIN-16)*, January 2002.
- [69] Hiroyuki Ohsaki, Mitsushige Morita and Masayuki Murata, “On modeling round-trip time dynamics of the Internet using system identification,” in *Proceedings of The 16th International Conference on Information Networking (ICOIN-16)*, January 2002.
- [70] Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, “Modeling end-to-end packet delay dynamics of the Internet using system identification,” in *Proceedings of Seventeenth International Teletraffic Congress*, December 2001.
- [71] Masayuki Murata and Shojiro Nishio, “New rganizations for IT-related R&D at Osaka University,”

- Proceedings of 4th AEARU Workshop on Computer Science*, (Kyoto), December 2001.
- [72] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Cooperative video streaming mechanisms with video quality adjustment," in *Proceedings of 4th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT 2001)*, (Katmandu & Atami), pp. 106-110, November 2001.
 - [73] Tatsuhiko Terai, Takuya Okamoto, Go Hasegawa and Masayuki Murata, "Design and implementation experiments of scalable socket buffer tuning," in *Proceedings of 4th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT 2001)*, (Katmandu & Atami), pp. 123-127, November 2001.
 - [74] Go Hasegawa and Masayuki Murata, "Dynamic threshold control of RED for fairness among thousands TCP connections," in *Proceedings of 4th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT 2001)*, (Katmandu & Atami), pp. 213-217, November 2001.
 - [75] Hiroyuki Hisamatsu, Hiroyuki Ohsaki and Masayuki Murata, "On modeling feedback congestion control mechanism of TCP using fluid flow approximation and queuing theory," in *Proceedings of 4th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT 2001)*, (Katmandu & Atami), pp. 218-222, November 2001.
 - [76] Go Hasegawa, Tatsuhiko Terai, Takuya Okamoto and Masayuki Murata, "Scalable socket buffer tuning for high-performance Web servers," in *Proceedings of IEEE International Conference on Network Protocols 2001 (ICNP 2001)*, pp. 281-289, November 2001.
 - [77] Go Hasegawa and Masayuki Murata, "Analysis of dynamic behaviors of many TCP connections sharing Tail-drop/RED routers," in *Proceedings of IEEE GLOBECOM 2001*, November 2001.
 - [78] Kazumine Matoba, Shingo Ata and Masayuki Murata, "Capacity dimensioning based on traffic measurement in the Internet," in *Proceedings of IEEE GLOBECOM 2001*, vol. 4, pp. 2532-2536, November 2001.
 - [79] Junichi Katou, Shin'ichi Arakawa and Masayuki Murata, "Design method of logical topologies in WDM network with quality of protection," in *Proceedings of Workshop on Optical Networking*, November 2001.
 - [80] Naoki Wakamiya, Masaki Miyabayashi, Masayuki Murata and Hideo Miyahara, "MPEG-4 video transfer with TCP-friendly rate control," in *Proceedings of IFIP/IEEE International Conference on Management of Multimedia Networks and Services 2001 (MMNS 2001)*, vol. LNCS2216, (Chicago), pp. 29-42, October 2001.
 - [81] Ken-ichi Kitayama, Kiyoshi Onohara and Masayuki Murata, "Almost packet loss-free asynchronous, variable-length optical packet switch with WDM buffering," in *Proceedings of 27th European Conference on Optical Communication*, (Amsterdam), September 2001.
 - [82] Takayuki Yamamoto, Masashi Sugano, Masayuki Murata, Takaaki Hatauchi and Yohei Hosooka, "Performance improvement in ad hoc wireless networks with consideration to packet duplication," in *Proceedings of the 7th Asia-Pacific Conference on Communications (APCC 2001)*, (Tokyo), pp. 348-351, September 2001.
 - [83] Masayuki Murata and Ken-ichi Kitayama, "Perspective on photonic multi-protocol label switching – Comparisons of WDM-based and OC (optical code)-based approaches," *Proceedings of the 7th Asia-Pacific Conference on Communications (APCC 2001)*, (Tokyo), pp. 236-239, September 2001.
 - [84] Ken-ichi Kitayama, Masayuki Murata and Hideo Miyahara, "A 1,000-channel WDM network can

- resolve network bottleneck,” *Proceedings of the 7th Asia-Pacific Conference on Communications (APCC 2001)*, (Tokyo), pp.113-116, September 2001.
- [85] Masahiro Miyoshi, Masashi Sugano and Masayuki Murata, “Performance Improvement of TCP in Wireless Cellular Network Based on Acknowledgement Control,” *Proceedings of 7th Asia-Pacific Conference on Communications (APCC 2001)*, pp.505-508, September 2001.
 - [86] Shin’ichi Arakawa and Masayuki Murata, “On Incremental Capacity Dimensioning for Reliable IP over WDM Networks,” *Proceedings of Opticomm 2001*, pp. 153-163, August 2001.
 - [87] Masahiro Sasabe, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, “Proxy caching mechanisms with video quality adjustment,” in *Proceedings of SPIE International Symposium IT-Com 2001*, (Denver), pp. 276-284, August 2001.
 - [88] Hiroyuki Ohsaki, Keiichi Takagaki and Masayuki Murata, “A control theoretical analysis of a window-based flow control mechanism for TCP connections with different propagation delays,” in *Proceedings of SPIE’s International Symposium on the Convergence of Information Technologies and Communications*, August 2001.
 - [89] Masaki Miyabayashi, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, “MPEG-TFRCP: Video Transfer with TCP-Friendly Rate Control Protocol,” *Proceedings of IEEE International Conference on Communications 2001 (ICC 2001)*, pp.137-141, June 2001.
 - [90] Shingo Ata, Masayuki Murata and Hideo Miyahara, “Efficient Cache Structures of IP Routers to Provide Policy-based Services,” *Proceedings of IEEE International Conference on Communications 2001 (ICC 2001)*, pp. 1561-1565, June 2001.
 - [91] Keiichi Takagaki, Hiroyuki Ohsaki and Masayuki Murata, “Analysis of a Window-Based Flow Control Mechanism based on TCP Vegas in Heterogeneous Network Environment,” *Proceedings of IEEE International Conference on Communications 2001 (ICC 2001)*, June 2001.
 - [92] Kouhei Fujimoto, Shingo Ata and Masayuki Murata, “Playout Control for Streaming Applications by Statistical Delay Analysis,” *Proceedings of IEEE International Conference on Communications 2001 (ICC 2001)*, June 2001.
 - [93] Masahiro Miyoshi, Masashi Sugano and Masayuki Murata, “Performance Evaluation of TCP Throughput on Wireless Cellular Networks,” *Proceedings of IEEE Vehicular Technology Conference 2001 Spring (VTC2001 Spring)*, May 2001.
 - [94] Ikutaro Ogushi, Shin’ichi Arakawa, Masayuki Murata and Ken-ichi Kitayama, “Parallel reservation protocols for achieving fairness in optical burst switching,” in *Proceedings of 2001 IEEE Workshop on High Performance Switching and Routing*, pp. 213-217, May 2001.
 - [95] Masayuki Murata, “On network dimensioning approach for the Internet,” *IEEE CQR 2001 International Workshop*, (Texas), May 2001.
 - [96] Ken-ichi Kitayama and Masayuki Murata, “Packet-Selective Photonic Add/Drop Multiplexer and its Application to Ultra High-Speed Optical Data Networking in LAN and MAN,” *Proceedings of The Fifth Working Conference on Optical Network Design and Modeling*, February 2001.
 - [97] Junichi Katou, Shin’ichi Arakawa and Masayuki Murata, “A Design Method of Logical Topology for IP over WDM Networks with Stable Routing,” *Proceedings of the Fifth Working Conference on Optical Network Design and Modeling*, February 2001.
 - [98] Masashi Sugano, Tsutomu Araki, Masayuki Murata, Takaaki Hatauchi and Yohei Hosooka, “Performance Evaluation of a Wireless Ad Hoc Network: Flexible Radio Network (FRN),” *Proceedings*

- of 2000 *IEEE International Conference on Personal Wireless Communications*, (Hyderabad), pp. 350-354, December 2000.
- [99] Go Hasegawa, Kenji Kurata and Masayuki Murata, "Analysis and Improvement of Fairness between TCP Reno and Vegas for Deployment of TCP Vegas to the Internet," *Proceedings of IEEE International Conference on Network Protocols (ICNP) 2000*, pp. 177-186, November 2000.
 - [100] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "TCP-Friendly Video Transfer," *Proceedings of SPIE International Symposium on Information Technologies 2000*, (Boston), November 2000.
 - [101] Taketo Yamashita, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Implementation and Evaluation of Integrated Resource Allocation Scheme for Real-Time Video Transfer to Maximize Users' Utility," *Proceedings of APCC 2000*, (Seoul), pp. 390-394, October-November 2000.
 - [102] Atsushi Nagate, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "The Effect of Three-way Soft Handoff for Integrated Evaluation in CDMA Mobile Cellular Systems," *Proceedings of APCC 2000*, (Seoul), pp. 617-621, October-November 2000.
 - [103] Shin'ichi Arakawa, Masayuki Murata, and Hideo Miyahara, "Design Methods of Multi-Layer Survivability in IP over WDM Networks," *Proceedings of OptiComm 2000*, pp. 279-290, October 2000.
 - [104] Kazuhiro Gokyu, Ken-ichi Baba and Masayuki Murata, "Path Setup Algorithms for Uniform/Nonuniform Traffic in Unidirectional Optical Compression TDM Rings," *Proceedings of SPIE Opticomm 2000*, pp. 98-109, October 2000.
 - [105] Hector Akamine, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "An Approach for Heterogeneous Video Multicast using Active Networking," *Proceedings of Second International Working Conference on Active Networks (IWAN 2000)*, (Tokyo), pp. 157-170, October 2000.
 - [106] Atsushi Nagate, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "An Integrated Approach for Performance Modeling and Evaluation of Soft Handoff in CDMA Mobile Cellular Systems," *Proceedings of VTC Fall 2000*, (Boston), September 2000.
 - [107] Hector Akamine, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "On the Construction of Heterogeneous Multicast Distribution Trees Using Filtering in an Active Network," *Proceedings of Quality of future Internet Services Workshop (QofIS 2000)*, (Berlin), pp. 272-284, September 2000.
 - [108] Kazumine Matoba, Shingo Ata and Masayuki Murata, "Improving Accuracy of Bandwidth Estimation for Internet Links by Statistical Methods," *Proceedings of 13th ITC Specialist Seminar*, pp. 29.1-29.10, September 2000.
 - [109] Takahiro Matsuo, Go Hasegawa and Masayuki Murata, "Scalable Automatic Buffer Tuning to Provide High Performance and Fair Service for TCP Connections," *Proceedings of INET 2000*, July 2000.
 - [110] Keiichi Takagaki, Hiroyuki Ohsaki and Masayuki Murata, "Stability Analysis of a Window-based Flow Control Mechanism for TCP Connections with Different Propagation Delays," *Proceedings of INET 2000*, (Yokohama), July 2000.
 - [111] Kenji Kurata, Go Hasegawa, Masayuki Murata, "Fairness Comparisons between TCP Reno and TCP Vegas for Future Deployment of TCP Vegas," *Proceedings of INET 2000*, July 2000.
 - [112] Masaki Miyabayashi, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Implementation of Video Transfer with TCP-Friendly Rate Control Protocol," *Proceedings of International Technical*

- Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2000)*, (Pusan), pp. 117-120, July 2000.
- [113] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "On TCP-Friendly Video Transfer with Consideration on Application-Level QoS," *Proceedings of IEEE International Conference on Multimedia & EXPO*, Vol. 2, (New York), pp. 843-846, July 2000.
 - [114] Masayuki Murata, "Reliability Issues in IP over WDM Networks," *Proceedings of 2000 IEEE Communication Quality and Reliability Workshop*, Greece, May 2000.
 - [115] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Comparisons of Packet Scheduling Algorithms for Fair Service among Connections on the Internet," *Proceedings of IEEE INFOCOM 2000*, March 2000.
 - [116] Kazuhiro Gokyu, Ken-ichi Baba and Masayuki Murata, "On Path Accommodation Methods for Optical Compression TDM Ring," *Proceedings of Workshop on Optical Networks 2000*, January 2000.
 - [117] Masayuki Murata, "Internet R&D in Osaka University," *Proceedings of Second AEARU Computer Science Workshop*, December 1999.
 - [118] Hiroyuki Ohsaki, Masayuki Murata, Toshimitsu Ushio and Hideo Miyahara, "A Control Theoretical Approach to a Window-Based Flow Control Mechanism with Explicit Congestion Notification," *Proceedings of IEEE CDC '99*, December 1999.
 - [119] Shin'ichi Arakawa, Masayuki Murata and Hideo Miyahara, "Delay Analyses of Wavelength Reservation Methods for High-Speed Burst Transfer in Photonic Networks," *Proceedings of APCC '99*, November 1999.
 - [120] Akira Watanabe, Masayuki Murata and Hideo Miyahara, "Comparisons of QoS from User's Perspective; Which Provides Better Utility to Users, Best-effort or Reservation-based Services?," *Proceedings of ITC-CSCC '99*, November 1999.
 - [121] Shingo Ata, Masayuki Murata and Hideo Miyahara, "Analysis and Application of Network Traffic Characteristics to Design of High-Speed Routers," *Proceedings of SPIE '99*, September 1999.
 - [122] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Performance Evaluation of HTTP/TCP on Asymmetric Networks," *Proceedings of SPIE '99*, pp. 423-432, September 1999.
 - [123] Hiroyuki Ohsaki, Masayuki Murata, Toshimitsu Ushio and Hideo Miyahara, "Stability Analysis of Window-Based Flow Control Mechanism in TCP/IP Networks," *Proceedings of IEEE 1999 CCA/CACSD Joint - Control Applications/Computer Aided Control Systems Design*, August 1999.
 - [124] Akira Watanabe, Masayuki Murata and Hideo Miyahara, "Which Provides Better Utility for Users, Best-Effort Service or Reservation-Based Service?," *Proceedings of ITC-CSCC '99*, July 1999.
 - [125] Shin'ichi Arakawa, Masayuki Murata and Hideo Miyahara, "Performance Analyses of Wavelength Reservation Methods for High-Speed Data Transfer in Photonic Networks," *Proceedings of ITC-CSCC '99*, July 1999.
 - [126] Shingo Ata, Masayuki Murata and Hideo Miyahara, "Analysis of Network Traffic and its Application to Design of High-Speed Routers," *Proceedings of ITC-CSCC '99*, July 1999.
 - [127] Yasuyuki Fujita, Masayuki Murata and Hideo Miyahara, "Analysis of Web Server Performance towards Modeling and Performance Evaluation of Web Systems," *Proceedings of 16th International Teletraffic Congress*, June 1999.
 - [128] Kentarou Fukuda, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "QoS Guarantees Based on End-to-End Resource Reservation for Real-Time Video Communications," *Proceedings of*

16th International Teletraffic Congress, pp. 857-866, June 1999.

- [129] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Fairness and Stability of Congestion Control Mechanisms of TCP," *Proceedings of IEEE INFOCOM '99*, pp. 1329-1336, March 1999.
- [130] Takahiro Matsuo, Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Comparisons of Packet Scheduling Algorithms for Fair Service among Connections," *Proceedings of IEEE Internet Workshop '99*, pp. 193-200, February 1999.
- [131] Yoshiaki Sumida, Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Effects of Upper-Layer Protocols on Self-Similarity of Network Traffic," *Proceedings of IEEE Internet Workshop '99*, pp. 81 - 88, February 1999.
- [132] Naoki Wakamiya, Kentarou Fukuda, Masayuki Murata and Hideo Miyahara, "On Multicast Transfer of Hierarchically Coded Video with QoS Guarantees," *Proceedings of IEEE Internet Workshop '99*, pp. 174-180, February 1999.
- [133] Yasuyuki Fujita, Masayuki Murata and Hideo Miyahara, "Performance Modeling and Evaluation of Web Systems," *Proceedings of The First AEARU Workshop on Web Technology*, pp. 91-98, November 24-25 1998.
- [134] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Utility-based Bandwidth Allocation Scheme for Real-Time Multimedia Stream Transfer," *Proceedings of 2nd IFIP/IEEE International Conference on Management of Multimedia Networks and Services '98 (MMNS '98)*, Versailles, pp. 180-194, November 1998.
- [135] Kentarou Fukuda, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Real-Time Video Distribution with Hybrid Hierarchical Video Coding in Heterogeneous Network and Client Environments," *Proceedings of 2nd IFIP/IEEE International Conference on Management of Multimedia Networks and Services '98 (MMNS '98)*, Versailles, pp. 5-19, November 1998.
- [136] Doo-Seop Eom, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "On Call Admission Control for Multimedia Wireless ATM Networks," *Proceedings of 4th Asia-Pacific Conference on Communications (APCC '98)*, pp. 14-18, November 1998.
- [137] Chikara Ohta, Tetsuya Takine and Masayuki Murata, "Bounded-Delay and Loss-Free Guarantees for Real-Time Video in Integrated Services Packet Networks," *Proceedings of IEEE GLOBECOM '98*, pp. 1937-1943, November 1998.
- [138] Shingo Ata, Masayuki Murata and Hideo Miyahara, "Performance Evaluation of TCP over ABT Protocols," *Proceedings of SPIE Conference on Performance & Control of Network Systems*, Boston, pp. 423-433, November 1998.
- [139] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Fairness and Stability of Congestion Control Mechanisms of TCP," *Proceedings of 11th ITC Specialist Seminar*, Yokohama, pp. 255-262, October 1998.
- [140] Masashi Sugano, Doo-Seop Eom, Masayuki Murata and Hideo Miyahara, "Performance Modeling for Signaling Traffic of Wireless Cellular Networks," *Proceedings of 5th International Workshop on Mobile Multimedia Communications (MoMuC '98)*, Berlin, pp. 255-262, October 1998.
- [141] Doo-Seop Eom, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "Call Admission Control for QoS Provisioning in Multimedia Wireless ATM Networks," *Proceedings of 1998 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC '98)*, July 1998.

- [142] Yasuyuki Fujita, Masayuki Murata and Hideo Miyahara, "Building the Performance Model of Web Systems based on Experimental Benchmark," *Proceedings of 1998 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC '98)*, July 1998.
- [143] Kentaro Miyamoto, Hiroaki Harai, Masayuki Murata and Hideo Miyahara, "Design Method for Path Accommodation for WDM/TDM Path Networks," *Proceedings of Third Optoelectronics and Communications Conference (OECC '98)*, pp. 432-433, July 1998.
- [144] Yasuyuki Fujita, Masayuki Murata and Hideo Miyahara, "Analysis of Web Server Performance towards Modeling and Performance Evaluation of Web Systems," *Proceedings of IEEE SICON '98*, July 1998.
- [145] Shingo Ata, Tetsuya Takine, Masayuki Murata and Hideo Miyahara, "Performance Improvement of ABT Protocols with Combined Bandwidth/Buffer Reservation," *Proceedings of 1998 IEEE ATM '98 Workshop*, Fairfax, pp. 129-136, May 1998.
- [146] Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Stability of Rate-Based Congestion Control Algorithm for ABR Service Class in ATM Networks," *Proceedings of IEEE ATM '98 Workshop*, Fairfax, pp. 102-111, May 1998.
- [147] Kentarou Fukuda, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "On Flow Aggregation for Multicast Video Transport," *Proceedings of 1998 Sixth International Workshop on Quality of Service (IFIP IWQoS '98)*, Napa, California, pp. 13-22, May 1998.
- [148] Yasuyuki Fujita, Masayuki Murata and Hideo Miyahara, "Performance Modeling and Evaluation of Web Systems," *Proceedings of 1998 IEEE Communication Quality and Reliability Workshop*, Florida, May 1998.
- [149] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Performance Evaluation of HTTP/TCP on Asymmetric Networks," *Proceedings of 1998 IEEE Communication Quality and Reliability Workshop*, Florida, May 1998.
- [150] Hiroaki Harai, Masayuki Murata and Hideo Miyahara, "Allocation of Wavelength Convertible Nodes and Routing in All-Optical Networks," *Proceedings of SPIE Conference on All-Optical Communication Systems*, pp. 277-287, November 1997.
- [151] Masahiko Nabe, Masayuki Murata and Hideo Miyahara, "Analysis and Modeling of WWW Traffic for Capacity Dimensioning for Internet Access Lines," *Proceedings of SPIE Conference on Performance & Control of Network Systems*, Dallas, November 1997.
- [152] Shingo Ata, Tetsuya Takine, Masayuki Murata and Hideo Miyahara, "Performance Comparisons of ABT/IT and DT in ATM Networks," *Proceedings of IEEE GLOBECOM '97*, Phoenix, pp. 1361-1366, November 1997.
- [153] Masashi Sugano, Doo-Seop Eom, Masayuki Murata and Hideo Miyahara, "A Combination Scheme of ARQ and FEC for Multimedia Wireless ATM Networks," *Proceedings of the 3rd Asia-Pacific Conference on Communications (APCC '97)*, Sydney, pp. 484-488, November 1997.
- [154] Kentarou Fukuda, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Rate Control of Real-time MPEG-2 over ATM DBR Service with Bandwidth Re-negotiation," *Proceedings of 22nd IEEE Conference on Local Computer Networks '97*, pp. 388-397, November 1997.
- [155] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Effectiveness of MPEG-2 Video Transmission on ATM Links – Is Statistical Multiplexing Really Useful for Bursty Video Transmission? -," *Proceedings of PROMS-MmNet '97*, Chile, pp. 28-37, November 1997.

- [156] Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Improvement of the Congestion Control Mechanism of TCP for ER-based ABR Service Class in ATM Networks," *Proceedings of Second IFIP Workshop on Traffic Management and Synthesis of ATM Networks*, September 1997.
- [157] Doo-Seop Eom, Byung-Han Ryu, Masayuki Murata and Hideo Miyahara, "Design of Virtual Connectionless Overlay Networks for Providing Connectionless Service Over ATM Networks," *Proceedings of 1997 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC '97)*, pp. 59-62, July 1997.
- [158] Masashi Sugano, Doo-Seop Eom, Masayuki Murata and Hideo Miyahara, "A Combination Scheme of ARQ and FEC for Multimedia Wireless ATM Networks," *Proceedings of 1997 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC '97)*, pp. 83-86, July 1997.
- [159] Masahiko Nabe, Kenichi Baba, Masayuki Murata and Hideo Miyahara, "Analysis and Modeling of WWW Traffic for Designing Internet Access Networks," *Proceedings of 1997 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC '97)*, pp. 517-520, July 1997.
- [160] Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Designing Efficient Explicit-Rate Switch Algorithm with Max-Min Fairness for ABR Service Class in ATM Networks," *Proceedings of IEEE International Conference on Communications 1997*, Montreal, pp. 182-186, June 1997.
- [161] Hiroaki Harai, Masayuki Murata and Hideo Miyahara, "Performance of All-Optical Networks with Limited-Range Wavelength Conversion," *Proceedings of IEEE International Conference on Communications 1997*, Montreal, pp. 416-421, June 1997.
- [162] Masahiko Nabe, Kenichi Baba, Masayuki Murata and Hideo Miyahara, "Analysis and Modeling of WWW Traffic for Designing Internet Access Networks," *Proceedings of IEEE QAMC International Workshop on Quality and Productivity for Communications*, California, May 1997.
- [163] Kentarou Fukuda, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "QoS Mapping between User's Preference and Bandwidth Control for Video Transport," *Proceedings of Fifth IFIP International Workshop on Quality of Service*, New York, pp. 291-302, May 21-23 1997.
- [164] Hiroaki Harai, Masayuki Murata and Hideo Miyahara, "Performance of Alternate Routing Methods in All-Optical Switching Networks," *Proceedings of IEEE INFOCOM '97*, Kobe, pp. 517-525, April 1997.
- [165] Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Performance of Rate-Based Congestion Control Algorithm with Binary-Mode Switch in ATM Networks," *Proceedings of the 35th Conference on Decision and Control (IEEE CDC '96)*, Kobe, pp. 2905-2910, December 1996.
- [166] Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Robustness of Rate-Based Congestion Control Algorithm with Binary-Mode Switch in ATM Networks," *Proceedings of IEEE GLOBECOM '96*, London, pp. 1097-1101, November 1996.
- [167] Go Hasegawa, Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Performance of TCP over ABR Service Class," *Proceedings of IEEE GLOBECOM '96*, London, pp. 1935-1941, November 1996.
- [168] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Quality of MPEG Transfer over ATM DBR Service Class with Effective Bandwidth Usage," *Proceedings of IEEE GLOBECOM '96*, London, pp. 1942-1948, November 1996.

- [169] Byunghan Ryu, Masayuki Murata and Hideo Miyahara, "An Application-Oriented Multicast Routing Algorithm for Virtual Path Based ATM Networks," *Proceedings of International Conference on Communications 1996*, pp. 33.9.1-33.9.7, November 1996.
- [170] Hiroaki Harai, Masayuki Murata and Hideo Miyahara, "Performance of Alternate Routing Methods in All-Optical Switching Networks," *Proceedings of 1996 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC '96)*, Vol. 1, pp. 91-94, July 1996.
- [171] Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Quality of MPEG Transfer over ATM DBR Service Class," *Proceedings of Conference on Analytical and Numerical Modeling Techniques with emphasis on Quality of Service (QoS) Modeling*, Budapest, pp. 867-873, June 1996.
- [172] Hideyuki Shimonisi, Tetsuya Takine, Masayuki Murata and Hideo Miyahara, "Performance Analysis of Fast Reservation Protocol with Generalized Bandwidth Reservation Method," *Proceedings of IEEE INFOCOM '96*, San Francisco, pp. 758-767, March 1996.
- [173] Hiroyuki Ohsaki, Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Parameter Tuning of Rate-Based Congestion Control Algorithms and its Application to TCP over ABR," *Proceedings of IFIP WG6.2 Broadband Communication: First Workshop on ATM Traffic Management*, pp. 383-390, December 1995.
- [174] Kenji Kawahara, Yuji Oie, Masayuki Murata and Hideo Miyahara, "Performance Analysis of Back-pressure Congestion Control: Preliminary Case," *Proceedings of IEEE GLOBECOM '95*, Singapore, pp. 304-309, November 1995.
- [175] Hiroyuki Ohsaki, Masayuki Murata, Hiroshi Suzuki, Chinatsu Ikeda and Hideo Miyahara, "Performance Evaluation of Rate-Based Congestion Control Algorithms in Multimedia ATM Networks," *Proceedings of IEEE GLOBECOM '95*, Singapore, pp. 1243-1248, November 1995.
- [176] Hiroyuki Ohsaki, Masayuki Murata, Hiroshi Suzuki, Chinatsu Ikeda and Hideo Miyahara, "Analysis of Rate-Based Congestion Control Algorithms for ATM Networks: Part 2 - Initial Transient State Analysis -," *Proceedings of IEEE GLOBECOM '95*, Singapore, pp. 1095-1101, November 1995.
- [177] Hiroyuki Ohsaki, Masayuki Murata, Hiroshi Suzuki, Chinatsu Ikeda and Hideo Miyahara, "Analysis of Rate-Based Congestion Control Algorithms for ATM Networks: Part 1 - Steady State Analysis -," *Proceedings of IEEE GLOBECOM '95*, Singapore, pp. 296-303, November 1995.
- [178] Hiroyuki Ohsaki, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Performance of an ATM LAN Switch with Back-pressure Function," *Data Communications and their Performance: Proceedings of the Sixth IFIP WG6.3 Conference on Performance of Computer Networks*, Istanbul, Turkey, pp. 99-113, October 1995.
- [179] Byunghan Ryu, Masayuki Murata and Hideo Miyahara, "Design Method for Virtual Path based ATM Networks with Multiple Traffic Classes," *Proceedings of Twelfth International Conference on Computer Communications (ICCC)*, Seoul, Korea, pp. 336-341, August 1995.
- [180] Byunghan Ryu, Masayuki Murata and Hideo Miyahara, "Design Method for Highly Reliable ATM Networks Based on Virtual Path Concept," *Proceedings of Asia-Pacific Conference on Communications '95*, Osaka, pp. 707-711, June 1995.
- [181] Naoki Wakamiya, Kenichi Baba, Masayuki Murata and Hideo Miyahara, "Performance Analysis of Traffic Control Methods in Multimedia ATM LAN," *Proceedings of IEEE INFOCOM '95*, Boston, pp. 1027-1036, April 1995.
- [182] Byunghan Ryu, Hiroyuki Ohsaki, Masayuki Murata and Hideo Miyahara, "Design Algorithm for

- Virtual Path based ATM Networks,” *Proceedings of Seventh Japan-Korea Joint Conference on Communications, Networks, Switching Systems*, Taejon, Korea, pp. 243-248, July 1994.
- [183] Masayuki Murata, Yasutoshi Kikuchi and Hideo Miyahara, “Performance Comparison of Error Recovery Schemes for High Bandwidth-Delay Product Networks,” *Proceedings of 14th International Teletraffic Congress*, pp. 841-852, 1994.
 - [184] Changhwan Oh, Masayuki Murata and Hideo Miyahara, “A Study of QOS Control Method for Virtual Path in ATM Networks,” *Proceedings of '93 Asia-Pacific Conference on Communications*, Taejon, Korea, pp. 392-396, August 1993.
 - [185] Yasutoshi Kikuchi, Hiroshi Inai, Masayuki Murata and Hideo Miyahara, “Comparative Evaluation of Error Recovery Schemes for High Bandwidth-Delay Product Networks,” *Proceedings of Sixth Japan-Korea Joint Conference on Communications, Networks, Switching Systems*, Sapporo, Japan, pp. 119-124, June 1993.
 - [186] Yuji Oie, Kenji Kawahara, Masayuki Murata and Hideo Miyahara, “Performance Analysis of Internally Unbuffered Large Scale ATM Switch with Bursty Traffic,” *Proceedings of IEEE INFOCOM '93*, San Francisco, pp. 1270-1279, March 1993.
 - [187] Changhwan Oh, Masayuki Murata and Hideo Miyahara, “A Study of Circuit Emulation Technique in ATM Networks,” *Proceedings of 1992 Joint Conference on Communications, Networks, Switching and Satellite Communications*, Kyungju, Korea, pp. 89-94, July 1992.
 - [188] Masashi Sugano, Masayuki Murata and Hideo Miyahara, “Design Algorithm for Communication Networks with Different Grades of Services,” *Proceedings of 1992 Joint Conference on Communications, Networks, Switching and Satellite Communications*, Kyungju, Korea, pp. 14-19, July 1992.
 - [189] Masayuki Murata, Yoshihiro Ohba and Hideo Miyahara, “Analysis of Flow Enforcement Algorithm for Bursty Traffic in ATM Networks,” *Proceedings of IEEE INFOCOM '92*, Florence, Italy, pp. 2453-2462, May 1992.
 - [190] Changhwan Oh, Masayuki Murata and Hideo Miyahara, “A Study of Priority Control Method for ATM Networks,” *Proceedings of Fourth Japan-Korea Joint Conference on Computer Networks, Switching and Satellite 1991*, Sendai, Japan, pp. 7-12, July 1991.
 - [191] Masayuki Murata and Hideo Miyahara, “Analysis of Flow Enforcement Algorithm for Bursty Traffic in ATM Networks,” *Proceedings of Third Japan-Korea Joint Conference on Computer Networks, Switching and Satellite 1990*, Cheju, Korea, pp. 25-29, December 1990.
 - [192] Yuji Oie, Tatsuya Suda, Masayuki Murata, David Kolson and Hideo Miyahara, “Survey of Switching Techniques in High-Speed Networks and Their Performance,” *Proceedings of IEEE INFOCOM '90*, San Francisco, pp. 1242-1251, June 1990.
 - [193] Kohei Shiimoto, Masayuki Murata, Yuji Oie and Hideo Miyahara, “Performance Evaluation of Cell Bypass Queueing Discipline for Buffered Banyan Type ATM Switches,” *Proceedings of IEEE INFOCOM '90*, San Francisco, pp. 677-685, June 1990.
 - [194] Yuji Oie, Tatsuya Suda, Masayuki Murata and Hideo Miyahara, “Survey of the Performance of Non-blocking Switches with FIFO Input Buffers,” *Proceedings of IEEE International Conference on Communications 1990*, pp. 316.1.1-316.1.5, June 1990.
 - [195] Masayuki Murata, Yuji Oie, Tatsuya Suda and Hideo Miyahara, “Analysis of a Discrete-Time Single-Server Queue with Bursty Inputs for Traffic Control in ATM Networks,” *Proceedings of IEEE GLOBECOM '89*, Dallas, pp. 49.5.1-49.5.6, December 1989.

- [196] Yuji Oie, Masayuki Murata, Koji Kubota and Hideo Miyahara, "Effect of Speed-up in Non-blocking Packet Switch," *Proceedings of IEEE International Conference on Communications 1989*, Boston, pp. 410-414, June 1989.
- [197] Masayuki Murata, Kohei Shiimoto and Hideo Miyahara, "Performance Analysis of Token Ring Networks with Reservation Priority Discipline," *Proceedings of IEEE INFOCOM '89*, Ottawa, pp. 9-18, April 1989.
- [198] Masayuki Murata and Hideaki Takagi, "Two-Layer Modeling for Local Area Networks," *Proceedings of IEEE INFOCOM '87*, San Francisco, pp. 132-140, March 1987.
- [199] Masayuki Murata and Hideaki Takagi, "Mean Waiting Times in Nonpreemptive Priority M/G/1 Queues with Server Switchover Times," *Proceedings of Teletraffic Analysis and Computer Performance Evaluation*, pp. 395-407, Elsevier Science Publishers B.V. (North-Holland), September 1986.
- [200] Hideaki Takagi and Masayuki Murata, "Queueing Analysis of Nonpreemptive Reservation Priority Discipline," *Performance '86 and ACM SIGMETRICS 1986, Performance Evaluation Review*, Vol. 14, pp. 237-244, May 1986.
- [201] Hideaki Takagi and Masayuki Murata, "Queueing Analysis of Scan-Type TDM and Polling Systems," *Proceedings of Computer Networking and Performance Evaluation* (T. Hasegawa, H. Takagi and Y. Takahashi, eds.), Tokyo, pp. 199-211, Elsevier Science Publishers B.V. (North-Holland), September 1985.
- [202] Takeshi Nishida, Masayuki Murata, Hideo Miyahara and Kensuke Takashima, "Dynamic Congestion Control in Interconnected Local Area Networks," *Proceedings of the Eleventh International Teletraffic Congress* (M. Akiyama, ed.), Kyoto, pp. 5.1A.1.1-5.1A.1.6, North-Holland, September 1985.
- [203] Takeshi Nishida, Masayuki Murata, Hideo Miyahara and Kensuke Takashima, "PLANS: Modeling and Simulation System for Local Area Networks," *Proceedings of the International Conference on Modeling Techniques and Tools for Performance Analysis*, Paris, pp. 235-254, North-Holland, May 1984.
- [204] Takeshi Nishida, Masayuki Murata, Hideo Miyahara and Kensuke Takashima, "Prioritized Token Passing Method in Ring-Shaped Local Area Networks," *Proceedings of IEEE International Conference on Communications 1983*, Boston, pp. D2.2.1-D2.2.6, June 1983.

1.4. 著書

- [1] Shin'ichi Arakawa and Masayuki Murata, "Reliability issues in IP over photonic networks," *Quality and Reliability of Large Scale Telecom Systems – Case Studies: Olympic Games*, John Wiley & Son, December 2002.
- [2] 村田 正幸, "情報システムと情報技術事典 (第4部)," (分担執筆), 培風館, 2002.
- [3] 村田 正幸, "社会基盤としてのインターネット," (1章～3章担当), 岩波書店, September 2001.
- [4] 宮原 秀夫, 村田 正幸, "インターネットがもたらすマルチメディア社会," 大阪大学出版会「大阪大学新世紀セミナー」シリーズ, February 2001.
- [5] 村田正幸, "マルチメディア情報ネットワーク - コンピュータネットワークの構成学 -," 共立出版, 1999.

- [6] 村田 正幸 (訳), “ATM ネットワーク,” 科学技術出版社, 1997.
- [7] 村田 正幸, “ATM ネットワークのトラヒック品質制御,” B-ISDN の基盤技術 (宮原秀夫, 村田正幸, 濃沼健夫 編), 4 章, pp. 49-59, リアライズ社, December 1994.

1.5. 学会誌解説

- [1] 村田正幸, “インターネットにおける通信品質とその制御,” 日本オペレーションズ・リサーチ誌, Vol. 48, No.3, March 2003.
- [2] 村田 正幸, “インターネットにおける輻輳制御とトラヒック特性,” システム / 制御 / 情報学会誌, Vol. 43, No. 3, March 1999.
- [3] 滝根 哲哉, 村田 正幸, “通信網における待ち行列 - 理論の応用と課題 -, オペレーションズ・リサーチ学会誌, Vol. 43, No. 5, pp. 264-271, May 1998.
- [4] 村田 正幸, “マルチメディアコンピュータネットワークの通信品質保証,” 電子情報通信学会学会誌, Vol. 81, No. 4, pp. 62-70, April 1998.
- [5] 村田正幸, 宮原秀夫, “通信トラヒック理論とその応用[VII]:トラヒック理論の今後の展開,” 電子情報通信学会誌, Vol. 78, No. 5, pp. 482-488, May 1995.
- [6] 村田正幸, 大崎博之, 原井洋明, 宮原秀夫, “通信トラヒック理論とその応用[VI]:シミュレーション技法とその適用例, 電子情報通信学会誌, Vol. 78, No. 3, pp. 264-270, March 1995.
- [7] 村田正幸, 宮原秀夫, “通信トラヒック理論とその応用[V]: ATM 網における統計多重化効果: 応用編(2),” 電子情報通信学会誌, Vol. 78, No. 2, pp. 195-202, February 1995.
- [8] 村田正幸, 宮原秀夫, “通信トラヒック理論とその応用 [IV]: B-ISDN におけるトラヒック理論: 応用編(1),” 電子情報通信学会誌, Vol. 78, No. 1, pp. 85-90, January 1995.
- [9] 村田正幸, 宮原秀夫, “通信トラヒック理論とその応用 [III]:トラヒック理論とその適用例: 基礎編(2),” 電子情報通信学会誌, Vol. 77, No. 12, pp. 1249-1255, December 1994.
- [10] 村田正幸, 宮原秀夫, “通信トラヒック理論とその応用 [II]:トラヒック理論とその適用例: 基礎編(1),” 電子情報通信学会誌, Vol. 77, No. 10, pp. 1043-1051, October 1994.
- [11] 村田正幸, 宮原秀夫, “通信トラヒック理論とその応用 [I]: システムのモデル化と性能評価,” 電子情報通信学会誌, Vol. 77, No. 9, pp. 968-975, September 1994.
- [12] 尾家祐二, 村田正幸, 宮原秀夫, “B-ISDN 用 ATM 交換機のアーキテクチャ,” 情報処理, Vol. 33, No. 2, pp. 134-142, February 1992.
- [13] 村田正幸, 宮原秀夫, “通信トラヒック研究の新しい動き,” 電子情報通信学会誌, Vol. 74, No. 2, pp. 142-145, February 1991.
- [14] 村田正幸, “待ち行列システムのモデリング言語 RESQ - RESearch Queueing package -, オペレーションズ・リサーチ学会誌, 待ち行列網のパッケージとシミュレータ特集号, Vol. 30, No. 7, pp. 442-449, July 1985.

1.6. 学会講演・パネル

- [1] 電子情報通信学会 2004 年ソサイエティ大会 「オーバーレイネットワークの品質管理と制御」, September 2004 (招待講演).
- [2] 電子情報通信学会 2004 年総合大会パネル討論, 「今後 5 年間のフォトニックネットワークの展開」, March 2004.

- [3] 村田正幸, “ネットワーク QoS とその制御,” 電子情報通信学会コミュニケーションクオリティ研究会第1回 QoS ワークショップ, February 2004. (招待講演).
- [4] 村田正幸, “次世代インターネットの研究の方向性,” 電子情報通信学会フォトニックネットワーク研究会, October 2003. (招待講演).
- [5] Masayuki Murata, “Current status and future directions of photonic networks,” *The Second TMRC (The Telecommunication Mathematics Research Center) 2003 Workshop*, (Seoul, Korea), July, 2003. (Invited Talk).
- [6] 電子情報通信学会 2003 年総合大会パネル討論「光バーストスイッチング」「光バーストスイッチングに未来はあるか?」, March 2003.
- [7] 電子情報通信学会 フォトニックスイッチング研究会 招待講演, “フォトニックインターネットへの展望,” December 2002.
- [8] 電子情報通信学会 2002 年ソサイエティ大会パネル討論「産学連携から見た情報通信教育と研究」パネラ, September 2002.
- [9] 電子情報通信学会 2002 年総合大会パネル討論「ブロードバンド通信時代の LSI 開発」座長, March 2002.
- [10] 電子情報通信学会 第 18 回情報ネットワーク・ネットワークシステム研究ワークショップ 招待講演, “プロトコルの高速化と公平性,” March 13, 2002.
- [11] 電子情報通信学会 第 18 回情報ネットワーク・ネットワークシステム研究ワークショップ パネル討論「進化するインターネットアプリケーションとそれを支える技術最前線 - インターネットアプリケーションは私達の生活をどう変えるか - 」パネラ, March 14, 2002.
- [12] 電子情報通信学会 情報ネットワーク研究会 招待講演, “光ネットワーク実現に向けたフォトニックパケットスイッチの技術課題,” December 2001 (講演者 北山研一).
- [13] 電子情報通信学会 第 15 回光通信システムシンポジウム パネル討論「ブロードバンド時代のサービス、そして技術」座長, December 6 2001.
- [14] AEARU Workshop on Computer Science, Panel Discussion on “Computer Science Education in AEARU Member Universities,” December 2001.
- [15] 電子情報通信学会 情報ネットワーク研究会 招待講演, “インターネットフローの公平性,” November 2001 (講演者 長谷川剛).
- [16] 電子情報通信学会 コミュニケーションクオリティ研究会 招待講演, “次世代ネットワークと QoS,” September 2001.
- [17] 電子情報通信学会通信ソサイエティ大会シンポジウム 招待講演, “ユーザレベルの品質保証を実現する QoS マッピング技術,” September 2001 (講演者 若宮直紀).
- [18] 電子情報通信学会ソサイエティ大会 パネル討論「フォトニックルーティング: 近未来像と将来像」, “フォトニック IP ルータへの展開,” September 2001.
- [19] 電子情報通信学会総合大会 パネル討論「1000 波 WDM ネットワークの可能性を検証する」, “1000 波はこのように使う: IP トラフィック転送技術,” March 2001.
- [20] 電子情報通信学会 テレコミュニケーションマネジメント研究会 パネル討論「次世代ネットワークアーキテクチャとそのサービス・制御・管理」, “次世代ネットワークアーキテクチャにおけるサービス品質,” March 2001.
- [22] 電子情報通信学会 テレコミュニケーションマネジメント研究会 招待講演, “次世代ネットワークにおける品質管理と今後の課題,” March 2001.
- [23] 情報通信ネットワークの新しい性能評価法シンポジウム 特別講演, “インターネットにおける計測と

- 制御,” January 2001.
- [24] マルチメディア推進フォーラム「ネットワークプロセッサ(NPU)と次世代網」, “次世代ネットワークとネットワークプロセッサ,” November 2000.
 - [25] *2000 Asia-Pacific Network Operations and Management Symposium (APNOMS 2000)*, Tutorial Talk, “IP over WDM Networks Towards the Next-Generation Internet,” October 2000.
 - [26] *2000 Asia-Pacific Network Operations and Management Symposium (APNOMS 2000)*, Distinguished Experts Panel on “New Management Paradigms and Technologies Towards the Internet Millennium,” “Network dimensioning of the Internet,” October 2000.
 - [27] 電子情報通信学会 第2回 テレコミュニケーションマネジメントワークショップ「IP 管理・制御とその実現技術」パネル, “IP 管理・制御の必要要件 - ネットワークに望むこと,” March 16, 2000.
 - [28] 電子情報通信学会 通信方式 / コミュニケーションクオリティ合同研究会 招待講演, “次世代高速・高品質インターネットのための技術課題,” February 18, 2000.
 - [29] 電子情報通信学会 第15回交換システム・情報ネットワーク研究ワークショップ パネル討論「今後のインフラネットワーク研究の在り方」, “大学におけるネットワーク研究の最新事情,” March, 1999.
 - [30] 情報通信ネットワークの新しい性能評価法シンポジウム 特別講演, “待ち行列理論に期待すること,” February 1999.
 - [31] 電子情報通信学会通信ソサイエティ大会シンポジウム 次世代インターネット講演, “QoS から見た次世代インターネットの課題,” October 2, 1998.
 - [32] 自動制御連合講演会 講演, “情報ネットワークにおけるトラヒック制御の役割と動向,” November 20, 1997.
 - [33] 電子情報通信学会「通信技術から見たインターネットの検証」シンポジウム講演, “インターネットにおけるサービス品質保証技術の検証,” June 18, 1997.
 - [34] NETWORKLD+INTEROP '97 TOKYO コンファレンス C04, C08, パネル討論「IP スイッチングはルータボトルネックを解消するか？」チェア, June 5, 1997.
 - [35] 電子情報通信学会 交換システム研究会 / コミュニケーションクオリティ研究会合同研究会 パネル討論「将来のマルチメディアサービスと品質 / コスト / タリフ」パネラ, December 13, 1996.
 - [36] 電子情報通信学会 通信方式研究専門委員会 第9回情報伝送と信号処理ワークショップ パネル討論「情報通信サービスにおけるベストエフォートとギャランティード」パネラ, November 25, 1996.
 - [37] 日本ソフトウェア学会チュートリアル講師 「ATM-LAN」, May 1996.
 - [38] 電子情報通信学会 / 光通信システム研究会 第9回光通信システムシンポジウム講演, “光通信に期待すること: 交換の立場から,” December 15, 1995.
 - [39] 電子情報通信学会 情報通信サービス / ネットワーク品質時限研究会 第1回ワークショップ講演, “ネットワークにおけるマルチメディアサービスの品質,” June, 1995.

1.7. 標準化団体寄書

- [1] Satoshi Doi, Ibrahim Khalil, Shingo Ata, Hiroshi Kitamura and Masayuki Murata, “IPv6 anycast functionality/terminology definition,” Internet Draft draft-ata-ipv6-anycast-resolving-01.txt, February 2004.
- [2] Shingo Ata, Ibrahim Kalil, Hiroshi Kitamura, and Masayuki Murata, “Possible deployment scenarios for IPv6 anycasting,” *Internet Draft*

draft-ata-anycast-deploy-scenario-00.txt, February 2004.

- [3] Shingo Ata, Hiroshi Kitamura and Masayuki Murata, "A protocol for anycast address resolving," *Internet Draft draft-ata-ipv6-anycast-resolving-01.txt*, February 2004.
- [4] Satoshi Doi, Shingo Ata, Hiroshi Kitamura, and Masayuki Murata, "IPv6 Anycast Functionality/Terminology Definition," *Internet Draft, draft-doi-ipv6-anycast-func-term-00.txt*, February 2003.
- [5] Shingo Ata, Hiroshi Kitamura and Masayuki Murata, "A protocol for anycast address resolving," *Internet Draft draft-ata-ipv6-anycast-resolving-00.txt*, June 2002.
- [6] Hiroyuki Ohsaki, Masayuki Murata, Hideo Miyahara, Chinatsu Ikeda and Hiroshi Suzuki, "Parameter Tuning for Binary Mode Switch - Analysis," *ATM Forum Contribution 95-1483*, December 1995.
- [7] Chinatsu Ikeda, Hiroshi Suzuki, Hiroyuki Ohsaki and Masayuki Murata, "Recommendation Parameter Set for Binary Switch," *ATM Forum Contribution 95-1482*, December 1995,
- [8] Chinatsu Ikeda, Hiroshi Suzuki, Go Hasegawa, Masayuki Murata and Arthur Lin, "Is FEC Really Effective to the Data Transmission?," *ATM Forum Contribution 95-1481*, December 1995.
- [9] Chinatsu Ikeda, Hiroshi Suzuki and Masayuki Murata, "Transient State Analysis and Maximum Buffer Requirements for Enhanced PRCA," *ATM Forum Contribution 94-0910*, September 1994.

1.8. 特許

- [1] Masashi Sugano, Hideo Miyahara, and Masayuki Murata, "Packet-Switching Communication Network and Method of Design," United States Patent 5381404, January 10, 1995
- [2] 菅野 正嗣, 村田 正幸, 宮原 秀夫, "パケット交換ネットワーク及びその設計方法," 特開平 6-104927, 1992年9月16日.
- [3] 菅野 正嗣, 村田 正幸, 宮原 秀夫, "パケット交換ネットワーク," 特開平2002-164929, 1992年9月16日.
- [4] 菅野 正嗣, 村田 正幸, 宮原 秀夫 "パケット交換ネットワーク及びその設計方法," 特開平 6-37807, 1992年7月14日 出願.
- [5] 菅野 正嗣, 村田 正幸, 宮原 秀夫, "パケット交換ネットワークを設計するための方法、パケット交換ネットワークを設計するための装置およびパケット交換ネットワークを構築するための方法," 特許第3347370号, 2002年9月6日.
- [6] 「無線通信システムにおけるパケット中継制御方式」 出願中
- [7] 「無線通信ネットワークシステム、無線端末、無線通信方法およびプログラム」 出願中
- [8] 下西英之, 牧一之進, 村田正幸「フロー間の公平性を保証するノード装置」 出願中
- [9] 北山研一, 村田正幸「光波長分割多重通信用の光波合流・分岐方法とその装置」 出願中
- [10] 原井洋明, 村田正幸「パケットスイッチにおける優先パケット転送を実現するバッファ管理方式、および、光パケットスイッチへの実装方式」 出願中
- [11] 原井 洋明, 福島 行信, 荒川 伸一, 村田 正幸, 宮原 秀夫, 「多期間にわたる光ネットワーク構成方式」 出願中
- [12] 上岡功司, 野田文雄, 若宮直紀, 村田正幸, 「ストリーミングサービス方法」(出願中)

2. 教育業績

- [1] 平成 10 年度情報処理学会情報処理教育カリキュラム調査委員会 CS 分科会委員
委員として、大学における情報科学、情報工学科のカリキュラム(通称 J97)策定を行った。特に、
情報ネットワーク学分野における履修指針の提言を行った。
- [2] Masayuki Murata, “Internet R&D in the CS Department of Osaka University,” Proceedings of 2nd
AEARU Computer Science Workshop, Hong Kong, December 1999.
- [3] 2000 年 大阪大学基礎工学部情報科学科 PBL 小委員会副委員長
情報科学科における1年次、2年次の PBL(創成科目)の企画立案のための委員会副委員長とし
て活動した。
- [4] 静岡大学教育評価・改善講演会 講演「大阪大学基礎工学部情報科学科における PBL に対する
取り組み」, March 30, 2001.
- [5] 大阪大学大学院基礎工学研究科情報数理系専攻主催 教育ワークショップ講演「PBL の紹介」,
March 13, 2001.
- [6] 2001 年 大阪大学基礎工学部情報科学科 PBL 小委員会委員長
情報科学科における1年次、2年次の PBL(創成科目)の企画立案を行っている。
- [7] 石原靖哲、村田正幸, “基礎工学部情報科学科における PBL 教育に関する取り組みとプレゼンテ
ーション能力の育成,” 大阪大学サイバーメディアセンターフォーラム, Vol.2, No.2, pp.18-22, 2001.
- [8] 2001 年より 日本技術者教育認定機構 審査員
- [9] 2004 年 4 月より大阪大学大学院情報科学研究科 情報ネットワーク学専攻長

3. 学会活動

3.1. 所属学会

IEEE、ACM、SPIE、The Internet Society、電子情報通信学会、情報処理学会

3.2. 学会活動

- | | |
|-------------|---|
| 昭和 62 年 4 月 | • 米国電気電子学会コミュニケーション学会アジア太平洋技術委員会委員(平成元年 3 月まで) |
| 平成 2 年 6 月 | • 電子情報通信学会交換システム研究専門委員会幹事(平成 5 年 5 月まで) |
| 平成 2 年 6 月 | • 電子情報通信学会情報通信サービス時限研究専門委員会委員(平成 3 年 5 月まで) |
| 平成 3 年 6 月 | • 電子情報通信学会通信サービス品質とネットワーク品質時限研究専門委員会委員(平成 5 年 5 月まで) |
| 平成 3 年 6 月 | • 電子情報通信学会通信グループ将来構想検討時限研究専門委員会委員(平成 4 年 5 月まで) |
| 平成 5 年 | • 電子情報通信学会和文論文誌「高速ネットワークアーキテクチャ」特集号編集委員会委員 |
| 平成 5 年 6 月 | • 電子情報通信学会情報通信サービス/ネットワーク品質時限研究専門委員会委員(平成 8 年 5 月まで) |
| 平成 5 年 5 月 | • 電子情報通信学会交換システム研究専門委員会委員(平成 11 年 5 月まで) |
| 平成 5 年 5 月 | • 電子情報通信学会英文論文誌編集委員(平成 9 年 5 月まで) |
| 平成 5 年 5 月 | • 電子情報通信学会通信研究グループ国際化アドホック委員会幹事(平成 6 年 5 月まで) |
| 平成 6 年 | • 電子情報通信学会英文論文誌「Future Private Networks」特集号編集委員会委員 |
| 平成 6 年 5 月 | • 電子情報通信学会通信研究グループ国際化アドホック委員会委員(平成 7 年 5 月まで) |
| 平成 7 年 | • 電子情報通信学会英文論文誌「Multimedia Computer Networks」特集号編集委員会委員 |
| 平成 7 年 5 月 | • 電子情報通信学会通信ソサイエティ国際交流委員会委員(現在に至る) |
| 平成 8 年 | • 電子情報通信学会英文論文誌「High Speed LAN」特集号編集委員会委員 |
| 平成 8 年 5 月 | • 電子情報通信学会通信ソサイエティ運営委員会諮問委員(平成 9 年 5 月まで) |
| 平成 8 年 5 月 | • 電子情報通信学会通信ソサイエティコミュニケーションクオリティ研究専門委員会委員(平成 9 年 5 月まで) |
| 平成 9 年 | • 電子情報通信学会和文論文誌「マルチメディアネットワーク/サービスと品質」特集号編集委員会委員 |
| 平成 9 年 | • 電子情報通信学会英文論文誌「Network Interworking」特集号編集委員会委員 |
| 平成 9 年 4 月 | • IEEE/ACM Transactions on Networking 編集委員会委員(現在に至る) |

- 平成 9 年 5 月 • 電子情報通信学会通信ソサイエティコミュニケーションクオリティ研究専門委員会副委員長(平成 12 年 5 月まで)
- 平成 9 年 12 月 • 情報処理学会「大学の情報専門学科における情報処理教育の実態に関する調査研究委員会」委員(平成 10 年 3 月まで)
- 平成 10 年 • Vice Chair of IEEE Communication Society Asia Pacific Region, Membership Development Committee (現在に至る)
- 平成 10 年 4 月 • 情報処理学会情報処理教育カリキュラム調査委員会 CS 分科会委員(平成 11 年 3 月まで)
- 平成 10 年 4 月 • 情報処理学会マルチメディア通信と分散処理研究会連絡委員(現在に至る)
- 平成 11 年 5 月 • 電子情報通信学会通信ソサイエティフォトニックネットワークをベースとする次世代インターネット技術研究専門委員会委員(現在に至る)
- 平成 12 年 5 月 • 電子情報通信学会通信ソサイエティコミュニケーションクオリティ研究専門委員会委員(現在に至る)
- 平成 12 年 5 月 • 電子情報通信学会通信ソサイエティテレコミュニケーションマネジメント研究専門委員会委員(現在に至る)
- 平成 12 年 • 電子情報通信学会英文論文誌 “Advanced Internetworking Based on Photonic Network Technologies” 特集号編集委員会委員
- 平成 12 年 • 電子情報通信学会英文論文誌 “New Developments on QoS Technologies for Information Networks” 特集号編集委員会委員
- 平成 13 年 • 電子情報通信学会英文論文誌 “Traffic Control and Performance Evaluation in the Internet” 特集号編集委員会委員
- 平成 13 年 • 情報処理学会論文誌”Multimedia Communications” 特集号編集委員会委員
- 平成 13 年 • 電子情報通信学会通信ソサイエティアドホック委員会委員
- 平成 13 年 • ONM Special Issue, Guest Editor
- 平成 13 年 • 電子情報通信学会英文論文誌 “Special Section on Papers Selected from ITC-CSCC 2001,” 特集号編集委員会委員
- 平成 15 年 7 月 • 電子情報通信学会 通信ソサイエティに所属するフォトニックネットワーク研究専門委員会 副委員長(平成 16 年 7 月まで)

3.3. 国際会議委員

- 1991 • *Petri Nets and Performance Models '91*, Technical Program Committee Member
- 1995 • *Asia-Pacific Conference on Communications '95*, Executive Committee Member
- 1996 • *Network Operation and Management Systems '96*, Program Committee Member
- *IEEE INFOCOM '96*, Technical Program Committee Member
- 1997 • *IEEE INFOCOM '97*, Local Arrangement Chair & Technical Program Committee Member
- 1998 • *Eleventh ITC Specialist Seminar*, Executive Committee Member
- 1999 • *IEEE ATM Workshop '99*, Technical Committee Member
- *IEEE Internet Workshop '99*, Technical Program Committee Co-Chair
- 2000 • *International Conference on Network Protocols 2000*, Technical Program Committee Vice-Chair

- *2000 Asia-Pacific Network Operations and Management Symposium (APNOMS 2000)*, Technical Program Committee Member
- *IEEE INFOCOM 2000*, Technical Program Committee Member
- *Second International Working Conference on Active Networks (IWAN 2000)*, Technical Program Committee Member
- *International Conference on Performance and QoS of Next Generation Networking -P&QNet2000-*, Technical Program Committee Member
- 2001 • *Internet Performance Symposium (IPS 2001)*, Technical Program Committee Member
- *Joint 4th International Conference on ATM and High Speed Intelligent Internet 2001*, Technical Program Committee Member
- *IEEE INFOCOM 2001*, Technical Program Committee Member
- *High Performance and Computing 2001*, Technical Program Committee Member
- *International Conference on the Performance and QoS of Next Generation Networking 2001*, Technical Program Committee Member
- *The 7th Asia-Pacific Conference on Communications (APCC 2001)*, Technical Program Committee Member
- *International Conference on Network Protocols 2001*, Technical Program Committee Member
- *Third International Working Conference on Active Networks (IWAN 2001)*, Technical Program Committee Member
- 2002 • *IEEE Communication Quality and Reliability International Workshop (CQR 2002)*, Executive Committee Member
- *IEEE INFOCOM 2002*, Technical Program Committee Member
- *IEEE International Conference on Communications, QoS Symposium*, Technical Program Committee Member
- *IEEE Internet Performance Symposium (IPS 2002)*, Technical Program Committee Member
- *The Sixth International Symposium on Parallel Architectures, Algorithms, and Networks, 2002 (I-SPAN '02)*, Technical Program Committee Member
- *World Telecommunications Congress/International Switching Symposium (WTC/ISS) 2002*, 連絡会委員
- *2002 IEEE Workshop on High Performance Switching and Routing (HPSR2002)*, Technical Program Committee Member
- *Opticomm 2002*, Program Committee Member
- *2002 International Conference on Wireless Networks (ICWN'02)*, Program Committee Member
- *Fourth International Working Conference on Active Networks (IWAN 2002)*, Technical Program Committee Member
- 2003 • *IEEE Communication Quality and Reliability International Workshop (CQR 2003)*, Technical Program Committee Member
- *The 7th Asia-Pacific Network Operations and Management Symposium (APNOMS) 2003*, Technical Program Committee Member.

- *5th Asia-Pacific Symposium on Information and Telecommunication Technologies (AP-SITT 2003)*, Technical Program Committee Chair
- *2003 IEEE Workshop on High Performance Switching and Routing (HPSR2003)*, Technical Program Committee Member
- *International Conference on Communication and Broadband Networking (ICBN) 2003*, Technical Program Committee Member
- *The Second International Workshop on QoS in Multiservice IP Networks 2003 (QoS-IP 2003)*, Technical Program Committee Member
- *International Symposium on Communication QoS, Reliability, and Performance Modeling 2003*, Technical Program Committee Member
- *International Conference on Wireless Networks (ICWN) 2003*, Technical Program Committee Member
- *Opticomm 2003*, Technical Program Committee Member
- 2004 • *International Conference on Broadband Communications 2004*, Tutorial Program Chair.
- *International Symposium on Communication QoS, Reliability, and Performance Modeling 2004*, Technical Program Committee Member
- *Opticomm 2004*, Technical Program Committee Member
- *The First International Workshop on Biologically Inspired Approaches to Advanced Information Technology*, Technical Program Committee Chair

4. その他の活動

4.1. 委員等

平成 8 年	日本能率協会 Network Kansai 96 ネットワーク企画委員会委員
平成 8 年 4 月	超高速ネットワーク・コンピュータ技術研究所プロトコル研究会委員(平成 11 年 3 月まで)
平成 8 年 9 月	基盤技術研究促進センター技術評価委員会専門委員(平成 11 年 3 月まで)
平成 9 年	日本能率協会 Network Kansai 97 ネットワーク企画委員会委員
平成 9 年 4 月	関西情報センター情報技術学公開講座企画委員会委員長(平成 10 年 3 月まで)
平成 9 年 4 月	関西情報センター平成 9 年度次世代情報システム研究会主査(平成 10 年 3 月まで)
平成 9 年 4 月	フォトニックネットワークフォーラム委員会委員(平成 12 年 3 月まで)
平成 9 年 9 月	日本データ通信協会ネットワークのインテリジェント化に関する研究会副座長(平成 12 年 3 月まで)
平成 9 年 4 月	日本学術振興会インターネット技術研究委員会委員(平成 18 年 6 月まで)
平成 9 年 4 月	日本学術振興会インターネット技術研究委員会 次世代ネットワーク構築のための基盤技術研究分科会(NGN) 副査(平成 12 年 3 月まで)
平成 9 年 11 月	日本能率協会 Network Kansai 98 ネットワーク企画委員会委員(平成 10 年 8 月まで)
平成 9 年 4 月	日本学術振興会未来開拓学術研究推進事業「高度マルチメディア応用システム構築のための先進的ネットワークアーキテクチャの研究」プロジェクト・コアメンバ - (現在に至る)
平成 10 年 4 月	大阪府デジタル情報流通基盤研究会委員(平成 11 年 3 月まで)
平成 11 年 6 月	中小企業総合事業団 平成 11 年度課題対応技術革新促進事業(課題対応新技術研究調査事業) 審査員(平成 12 年 3 月まで)
平成 12 年 5 月	NHK 放送技術研究所客員研究員(平成 14 年 3 月まで)
平成 12 年 4 月	中小企業総合事業団 平成 12 年度課題対応技術革新促進事業(課題対応新技術研究調査事業) 審査員(平成 13 年 3 月まで)
平成 13 年 4 月	日本学術振興会インターネット技術研究委員会 次世代ネットワーク構築のための基盤技術研究分科会(NGN) 主査(現在に至る)
平成 13 年 6 月	中小企業総合事業団 平成 13 年度課題対応技術革新促進事業(課題対応新技術研究調査事業) 審査員(平成 14 年 3 月まで)
平成 13 年 4 月	通信・放送機構「大阪府マルチメディア・モデル図書館展開事業」研究員(平成 16 年 3 月まで)
平成 13 年 10 月	通信・放送機構「大阪府マルチメディア・モデル図書館展開事業」アドバイザー(現在に至る)平成 17 年 3 月まで)
平成 13 年 10 月	NEC ネットワークス社外アドバイザー(現在に至る)
平成 14 年 1 月	経済産業省 中小企業地域新生コンソーシアム研究開発事業に関する案件の事前評価委員(平成 15 年 1 月まで)
平成 14 年 1 月	東北大学電気通信研究所外部評価委員
平成 14 年 4 月	日本能率協会関西地域本部 Internet&Mobile2002 企画委員会副委員長

	(平成 15 年 1 月まで)
平成 14 年 6 月	中小企業総合事業団 平成 14 年度課題対応技術革新促進事業 (課題対応新技術研究開発事業) 審査員 (平成 15 年 3 月まで)
平成 15 年 2 月	経済産業省 地域技術開発関連事業に関する事前評価委員 (平成 16 年 1 月まで)
平成 15 年 4 月	中小企業総合事業団 平成 15 年度課題対応技術革新促進事業に関する審査委員 (平成 16 年 3 月まで)
平成 15 年 8 月	日本学術振興会 特別研究員等審査会専門委員 (平成 17 年 7 月まで)
平成 16 年 3 月	総務省情報通信政策局「ユビキタスセンサーネットワーク技術に関する調査研究会」構成員 (平成 16 年 7 月まで)
平成 16 年 5 月	経済産業省 地域技術開発支援事業に係る事前評価委員 (平成 18 年 5 月まで)
平成 16 年 5 月	中小企業総合事業団「中小企業・ベンチャー挑戦支援事業のうち実用化研究開発事業」に関する第一次事前評価委員 (平成 16 年 6 月まで)
平成 16 年 6 月	KDDI 株式会社 KDDI 技術懇談会委員 (平成 19 年 3 月まで)

4.2. 学外講演

- 1999 年 富士通研究所講演 「次世代ネットワークのための QoS 技術」, August 1999.
NEC ユニバーシティ第 39 期基幹技術研修講師「高品質インターネットの技術課題」, November 1999.
- 2000 年 近畿地区技官研修講師「電話からインターネットへ - 新しい通信パラダイムとは - 」, August 2000.
NHK 放送技術研究所講演 「高品質インターネットの技術課題」, September 17, 2000.
NEC ユニバーシティ第 40 期基幹技術研修講師 「インターネットにおけるトラヒックエンジニアリングの最新研究動向と今後の課題」, November 2000.
マルチメディア推進フォーラム講演「次世代ネットワークとネットワークプロセッサ」, November 28, 2000.
- 2001 年 NEC ユニバーシティ第 41 期基幹技術研修講師 「インターネットにおけるトラヒックエンジニアリングの最新研究動向と今後の課題」, January 2001..
インテル ネットワークプロセッサ記者発表会講演 「ネットワーク研究・開発における大学の役割」, March 6, 2001.
KDDI 研究所講演会 「インターネットにおけるネットワークディメンジョニング」, March 12, 2001.
NTT 研究所講演会 「次世代インターネットと IP over Photonic の展望」, March 14, 2001.
NEC 研究所講演会 「高速ネットワーク研究の最新動向」, March 30, 2000.
静岡大学教育評価・改善講演会 講演「大阪大学基礎工学部情報科学科における PBL に対する取り組み」, March 29, 2001.
NEC ユニバーシティ第 42 期基幹技術研修講師 「インターネットにおけるトラヒックエンジニアリングの最新研究動向と今後の課題」, November 2001.

- 2002 年 NEC ユニバーシティ第 43 期基幹技術研修講師「インターネットの高速化における諸問題」, January 11, 2002.
日本アイ・ビー・エム 東京基礎研究所講演会「インターネットにおけるネットワークプロビジョニング」, January 18, 2002.
- 2003 年 NEC ユニバーシティ第 45 期基幹技術研修講師「インターネットにおけるトラフィックエンジニアリングの最新研究動向と今後の課題」, March 14, 2003.
三菱電機株式会社東部地区研究所講演会「フォトリックインターネットの現状と今後」, July 1, 2003.
- 2004 年 NTT 武蔵野研究開発センタ講演会「次世代インターネットにおける今後の研究の方向性について」, April 8, 2004.

5. 受賞歴

昭和 61 年 6 月	電気通信普及財団テレコム自然科学賞
平成 7 年 3 月	電子情報通信学会交換システム研究賞
平成 11 年 3 月	電子情報通信学会交換システム研究賞
平成 11 年 3 月	電子情報通信学会情報ネットワーク研究賞
平成 12 年 3 月	電子情報通信学会交換システム研究賞
平成 13 年 3 月	電子情報通信学会テレコミュニケーションマネジメント研究賞
平成 14 年 3 月	電子情報通信学会テレコミュニケーションマネジメント研究賞