

Journal Papers

- 1.Chunsheng Xin, "Resource Planning for Dynamic Traffic Grooming in WDM Optical Network," submitted to Elsevier Journal of Computer Networks.
- 2.Chunsheng Xin, "Blocking Analysis of Dynamic Traffic Grooming on Mesh WDM Optical Networks," submitted to IEEE Transaction on Networking.
- 3.Chunsheng Xin, Bin Wang, Xiaojun Cao, Jikai Li, "Logical Topology Design for Dynamic Traffic Grooming in Mesh WDM Optical Networks," accepted to IEEE Journal of Lightwave Technology.
- 4.Chunsheng Xin and Chunming Qiao, "Hybrid Optical Switching in WDM Optical Networks," accepted to IEEE Communication Magazine.
- 5.Xiaojun Cao, Vishal Anand, Jikai Li, and Chunsheng Xin, "Waveband Switching Networks with Limited Wavelength Conversion," IEEE Communications Letters, vol 9(6), pp. 646 -- 648, June 2005.
- 6.Chunsheng Xin, Chunming Qiao, Sudhir Dixit, "Traffic Grooming in the Mesh WDM Optical Network -- Performance Analysis," IEEE Journal of Selected Areas in Communications (JSAC), vol 22(9), pp. 1658-69, Nov. 2004.
- 7.H. Zang, P. Ho, Y. Ye, Chunsheng Xin, and W. Wen, "Issues in Designing Optical Switched Networks -- Topics Overview on APOC 2001," Optical Networks Magazine, May/Jun. 2003, Vol. 4, NO. 3, pp.49-64
- 8.Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "A Joint Lightpath Routing Approach in Survivable Optical Networks," Optical Networks Magazine, May/Jun. 2002, Vol. 3, NO. 3, pp. 13-20
- 9.Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "An Emulation-based Comparative Study of Centralized and Distributed Control Schemes for Optical Networks," Optical Networks Magazine, Sep./Oct. 2002, Vol. 3, NO. 5, pp. 44-51
- 10.Chunsheng Xin, Yinghua Ye, Ti-Shiang Wang, Myungsik Yoo, Sudhir Dixit, and Chunming Qiao, "On an IP-Centric Optical Control Plane," IEEE Communications Magazine, Sep. 2001, Vol. 39, pp. 88-93
- 11.Chunsheng Xin, Yufang Sun, "Design and Implementation of a Simplified-Unsimplified Chinese Character Conversion System," Journal of Software, Nov. 2000, Vol. 11, NO. 11, pp. 1534-1540 (a journal published in China)
- 12.Chunsheng Xin, Yufang Sun, "Simplified-Unsimplified Chinese Conversion and Word Segmentation," Mini-Micro System, Sep. 2000, Vol. 21, NO. 9, pp. 982-985 (a journal published in China)

Conference Papers

1. Kennie H. Jones, Kenneth N. Lodding, Stephan Olariu, Larry Wilson, Chunsheng Xin, "Biology Inspired Approach for Communal Behavior in Sensor Networks," in Proceeding of the 39th Hawaii International Conference on System Sciences (HICSS-39), Jan. 4-7, 2006, Kauai, Hawaii.
2. Chunsheng Xin, Bo Xie, Chien-Chung Shen, "A Novel Layered Graph Model for Topology Formation and Routing in Dynamic Spectrum Access Networks," in Proceeding of First IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks, Nov 8-11, 2005, Baltimore, MD.
3. Kennie H. Jones, Kenneth N. Lodding, Stephan Olariu, Larry Wilson, Chunsheng Xin, "An Ecosystem Model for Massively-Deployed Sensor Networks," in Proceeding of 2005 International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP 2005), Dec. 5-8, 2005, Melbourne, Australia.
4. Kennie H. Jones, Kenneth N. Lodding, Stephan Olariu, Larry Wilson, Chunsheng Xin, "Sensor Networks for Situation Management: A Biomimetic Model," in Proceeding of MILCOM, Workshop on Situation Management (SIMA), Oct. 17, 2005, Atlantic City, NJ.
5. Kennie H. Jones, Kenneth N. Lodding, Stephan Olariu, Larry Wilson, Chunsheng Xin, "Biology-Inspired Distributed Consensus in Massively-Deployed Sensor Networks," in Proceeding of 4th International Conference on AD-HOC Networks & Wireless (AD-HOC NOW), Oct. 6 - 8, 2005, Cancun, Mexico.
6. Kennie H. Jones, Kenneth N. Lodding, Stephan Olariu, Larry Wilson, Chunsheng Xin, "Energy Usage in Biomimetic Models for Massively-Deployed Sensor Networks," in Proceeding of Third International Symposium on Parallel and Distributed Processing and Applications (ISPA'05), First International Workshop on Mobile Ad-hoc and Ubiquitous Sensor Networks (MASN), Nov 2 -5, 2005, Najing, China.
7. Kennie H. Jones, Kenneth N. Lodding, Stephan Olariu, Larry Wilson, Chunsheng Xin, "Biomimetic Models for an Ecological Approach to Massively-Deployed Sensor Networks," in Proceeding of 18th International Conference on Parallel and Distributed Computing Systems (PDCS), Sep 12-14, 2005, Las Vegas, NE.
8. Bin Wang, Tianjian Li, Chunsheng Xin, "On Survivable Service Provisioning in WDM Optical Networks Under a Scheduled Traffic Model," in Proceeding of the IEEE 2005 Global Communications Conference (Globecom), Nov 29 -- Dec 2, 2005, St. Louis, MO.
9. Bin Wang, Tianjian Li, Chunsheng Xin, "On Service Provisioning Under a Scheduled Traffic Model in Reconfigurable WDM Optical Networks," in Proceeding of

International Conference on Broadband Networks (BroadNets), Oct. 3 -- 7, 2005, Boston, MA.

10.Chunsheng Xin, Jikai Li, Xiaojun Cao, Bin Wang, "A Route Segment Technique for Blocking Analysis of Dynamic Traffic Grooming," in Proceeding of International Conference on Broadband Networks (BroadNets), Second International Workshop on Traffic Grooming in WDM Networks, Oct. 7, 2005, Boston, MA.

11.Chunsheng Xin, Bin Wang, Xiaojun Cao, Jikai Li, "Formulation of Multi-Hop Dynamic Traffic Grooming in WDM Optical Networks," in Proceeding of International Conference on Broadband Networks (BroadNets), Second International Workshop on Traffic Grooming in WDM Networks, Oct. 7, 2005, Boston, MA.

12.Chunsheng Xin, Bin Wang, Xiaojun Cao, Jikai Li, "Computing Loss Probability for Dynamic Traffic Grooming in Optical Networks with Wavelength Conversion," in Proceeding of the IEEE 2005 Global Communications Conference (Globecom), Nov 29 - Dec 2, 2005, St. Louis, MO.

13.Chunsheng Xin, Bin Wang, Xiaojun Cao, Jikai Li, "A Heuristic Logical Topology Design Algorithm for Multi-Hop Dynamic Traffic Grooming in WDM Optical Networks," in Proceeding of the IEEE 2005 Global Communications Conference (Globecom), Nov 29 -- Dec 2, 2005, St. Louis, MO.

14.Jikai Li, Xiaojun Cao, Chunsheng Xin, "Double Reservation in Optical Burst Switching Networks," in Proceeding of IEEE Sarnoff Symposium, 2005, pp. 180 -- 183.

15.Chunsheng Xin, Feng He, "Cross-Layer Path Computation for Dynamic Traffic Grooming in Mesh WDM Optical Networks," in Proceeding of the 43rd ACM Southeast Conference, 2005.

16.Chunsheng Xin, Bin Wang, "Logical Topology Design for Dynamic Traffic Grooming in Mesh WDM Optical Networks," in Proceeding of IEEE International Conference on Communication (ICC), 2005, Seoul, South Korea.

17.Chunsheng Xin, "Computing Blocking Probability of Dynamic Traffic Grooming in Mesh WDM Optical Networks," in Proceeding of International Conference on Broadband Networks (BroadNets), 2004.

18.Chunsheng Xin, Chunming Qiao, "Performance Analysis of Multi-Hop Traffic Grooming in Mesh WDM Optical Networks", in Proceeding of the IEEE 2003 Internal Conference on Computer Communications and Networks (ICCCN), 2003, pp. 237 -- 242.

19.Chunsheng Xin, Chunming Qiao, Sudhir Dixit, "Analysis of Single-Hop Traffic Grooming in Mesh WDM Optical Networks", in Proceeding of the International Society for Optical Engineering (SPIE), Vol. 5285, the Fourth Annual Optical Networking and Communications Conference (Opticomm 2003), pp. 91 -- 101.

20. Chunsheng Xin, Chunming Qiao, Sudhir Dixit, "Traffic Grooming in Mesh WDM Optical Networks -- Performance Analysis," in Proceeding of the IEEE 2003 Global Communications Conference (Globecom), 2003, pp. 3732 -- 3736.
21. Chunsheng Xin, Chunming Qiao, Yinghua Ye, Sudhir Dixit, "A Hybrid Optical Switching Approach," in Proceeding of the IEEE 2003 Global Communications Conference (Globecom), 2003, pp. 3808 -- 3812.
22. Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "An Agent-based Traffic Grooming & Management Mechanism for IP over Optical Networks," in Proceeding of the IEEE International Conference on Computer Communications and Networks (ICCCN), 2002, Miami, FL, pp. 425 – 430
23. Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "An Integrated Traffic Transport Approach in Optical Networks," in Proceeding of the International Society for Optical Engineering (SPIE), Vol. 4874, the Third Optical Networking and Communications Conference (Opticomm 2002), Jul. 29 -- Aug. 1, 2002, Boston, MA, pp. 51-60
24. Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "An Integrated Lightpath Provisioning Approach in Mesh Optical Networks," in IEEE/OSA Optical Fiber Communications (OFC) Technical Digest, OFC 2002, Mar. 16-22, 2002, Anaheim, California, pp. 547 – 549
25. Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "A Joint Lightpath Routing Approach in Survivable Optical Networks," in Proceeding of the International Society for Optical Engineering (SPIE), Vol. 4585, the Asian-Pacific Optical and Wireless Communications Conference (APOC) 2001, Nov. 12-16, 2001, Beijing, China, pp. 139 – 146
26. Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "A Joint Working and Protection Path Selection Approach in WDM Optical Networks," in Proceeding of the IEEE 2001 Global Communications Conference (Globecom), 2001, Nov. 25-29, 2001, San Antonio, Texas, Vol. 4, pp. 2165-2168
27. Chunsheng Xin, Yinghua Ye, Sudhir Dixit, Chunming Qiao, "An Enhanced Route Assignment Mechanism in Optical Control Plane," in Proceeding of the International Society for Optical Engineering (SPIE), Vol. 4599, the Second Optical Networking and Communications Conference (Opticomm 2001), Aug 19-24, 2001, Denver, Colorado, pp. 104-111
28. Chunsheng Xin, Yinghua Ye, Sudhir Dixit, and Chunming Qiao, "An Emulation-based Comparative Study of Centralized and Distributed Control Schemes for Optical Networks," in Proceeding of the International Society for Optical Engineering (SPIE), Vol 4527, SPIE's International Symposium on the Convergence of Information

Technologies and Communications (ITCom) 2001, Aug. 19-24, 2001, Denver, Colorado, pp. 65-72

29.Chunsheng Xin and Chunming Qiao, "A Comparative Study of OBS and OFS," in IEEE/OSA Optical Fiber Communications (OFC) Technical Digest, OFC 2001, Mar. 17-23, 2001, Anaheim, California

30.Chunsheng Xin, Ti-Shiang Wang, Yinghua Ye, Myungsik Yoo, Sudhir Dixit, and Chunming Qiao, "On Design and Architecture of an IP over WDM Optical Network Control Plane," Towards an Optical Internet, the International Federation for Information Processing (IFIP) working conference on Optical Network Design and Modeling (ONDM) 2001, Feb 5-8, 2001, Vienna, Austria, pp. 297-312