

## CURRICULUM VITAE

**Xiaohua Jia**, IEEE Fellow (Computer Society) and Chair Professor  
Dept of Computer Science, City University of Hong Kong  
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### Qualifications

- 1987 – 1991. **DSc**, University of Tokyo
- 1984 – 1986. **MSc**, Univ. of Science and Technology of China
- 1979 – 1984. **BSc**, Univ. of Science and Technology of China

### Employment

- 2007 – Present, Chair Professor
- 2003 – 2007, Professor
- 1996 – 2003, Associate Professor  
Dept of Computer Science, City University of Hong Kong
- 1991 – 1996, Lecturer  
Dept. of Computer Science, University of Queensland, Australia

### Awards

- IEEE Fellow (Computer Society), 2013.
- PengChen Professor (鹏城学者), awarded by ShenZhen Municipal Government, 2010.
- IEEE Outstanding Service Award, 2010.
- ACM Recognition of Service Award, 2008.
- Tan Chin Tuan Exchange Fellowship, Nanyang Technological University, Dec 2004 – Mar 2005.
- Distinguished visiting fellowship, La Trobe University, Australia, 2003/2004.
- Senior fellowship of JSPS (Japan Society for the Promotion of Science), Tsukuba University, Japan, Nov 2001 – Jan 2002.
- Cheung Kong Professor, awarded by Ministry of Education, P.R. China in Oct 2001.

### Journal Editorship

- Editor-in-Chief, ICST Transactions on Scalable Information Systems (<http://icst.org/scalable-information-systems/>).
- Associate Editor, IEEE Trans on Parallel and Distributed Systems, 2006 – 2009.
- Editor on Board, Wireless Networks (ACM/Baltzer Science)
- Editor on Board, Journal of World Wide Web: Internet and Web Information Systems (Kluwer Academic).
- Editor on Board, Journal of Combinatorial Optimization (Kluwer Academic).
- Editor on Board, Journal of Networks (Academy Publisher)
- Editor on Board, The Journal of Supercomputing (Springer), 2004 – 2007.
- Editor on Board, International Journal of Wireless and Mobile Computing (Inderscience).

- Editor on Board, International Journal of Sensor Networks (Inderscience).

### **Major International Conference Organizations**

- TPC Vice-Chair on “Mobile and Wireless Computing”, IEEE International Conference on Distributed Computing Systems (ICDCS), 2015
- TPC Area-Chair, IEEE Infocom, 2015
- Director, Croucher Foundation Advanced Study Institute (ASI) on Information Security and Privacy in Social Networks and Cloud Computing, Hong Kong, Dec, 2014
- Local Organization Co-Chair, ACM SIGCOMM’13, Hong Kong, Aug 2013.
- Co-Chair, The 8<sup>th</sup> International Conference on Wireless Algorithms, Systems, and Applications (WASA 2013), August, Zhangjiajie, China, 2013.
- General Chair, The 3<sup>rd</sup> IEEE International Workshop on Security and Privacy in Cloud Computing, in Conjunction with IEEE ICDCS, Macau, Jun 2012.
- Co-Chair, Co-Chair, The First IEEE International Workshop on Internet of Things: Smart Objects and Services, in conjunction with IEEE WoWMoM, SFO, USA, Jun 2012.
- TPC Co-Chair, Wireless Ad Hoc and Sensor Networks Symposium, International Conference on Computing, Networking and Communications (ICNC), Hawaii, Jan-Feb 2012.
- Panel Co-Chair, IEEE Infocom, 2011.
- TPC Co-Chair, IEEE GlobeCom 2010 - Ad Hoc and Sensor Networking Symposium, 2010.
- TPC Area-Chair, IEEE Infocom, 2010.
- TPC Co-Chair, IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS), Hong Kong, Oct 2009.
- International Liaison Co-Chair, IEEE International Conf on Distributed Computing Systems (ICDCS), Beijing, Jun 2008.
- General Chair, ACM International Symposium on Mobile Ad Hoc Networking and Computing, Hong Kong, May 2008.
- Co-Chair, Mobile Computing Symposium, in conjunction with International Wireless Communication and Mobile Computing Conf (IWCMC), 2008, 2007, 2006.
- General Co-Chair, The 2<sup>nd</sup> International Conference on Mobile Ad Hoc and Sensor Networks (MSN), 2008, 2006.
- General Co-Chair, International Workshop on Theoretical and Algorithmic Aspects of Sensor and Ad-hoc Networks, Miami, June, 2007.
- Director, Croucher Foundation Advanced Study Institute on Wireless Sensor Networks: Theory and Applications, Hong Kong, Dec, 2006.
- General Chair, First ACM/CreateNet International Conference on Scalable Information Systems (INFOSCALE), 30 May - 1 Jun 2006, Hong Kong.
- International Vice-Chair, IEEE Infocom, 2005.
- Co-Chair, NSF workshop on Theoretical Aspects of Wireless Ad Hoc Networks, Chicago, Jun 2004.

- Co-Chair, IEEE ICDCS Workshop on New Advances of Web Server and Proxy Technologies, USA, May 2003.
- Vice Co-Chair of 6<sup>th</sup> IEEE International Conf on Computer Communications and Networks (IC3N), USA, 1997.
- TPC member, IEEE INFOCOM, 2009, 2008, 2007, 2005, 2004.

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### **Major Administration Experience**

- Member of Board of Graduate Studies (BGS), CityU (2012 - )
- Member of Committee on Research Degrees Candidature (CRDC), CityU (2012 - )
- Member of Selection Committee for Appointment of Deans of Colleges/Schools and Heads of Academic Departments, CityU (2012 - )
- Member of Working Group on Mainland Research Students Collaboration, CityU (2010 - )
- Member of College Committee, CSE, CityU, 2012 -
- Technology Advisory Panel Member, Hong Kong Science & Technology Parks (2010 – present)
- Member of NSFC/RGC Joint Research Scheme Joint Selection Committee (2010 – )
- Member of HK RGC Engineering Panel (07 – present)
- Chair of Dept'l Research and Research Degree Committee (97 - 2007)
- Member of Faculty Research Committee (97 - 2007)
- Subject Group Leader of Computer System (99 – 2005, 2012 - present)

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### **Research Projects (PI only)**

- 1) Information Security and Privacy in Social Networks and Cloud Computing, The Croucher Foundation ASI (Advanced Study Institute), (CityU 9500021), Dec 2014, HK\$410,000.
- 2) Privacy-Preserving Algorithms for Outsourced Data Mining in Cloud Computing, RGC GRF grant (CityU 9042037), HK\$692,894, 1 Jan 2014 – 31 Dec 2016.
- 3) Information Centric Networks and Software Defined Networks for Cloud Services, funded by Huawei Technology Co Ltd, HK\$1,395,000, Sept 2013 – Aug 2015.
- 4) Minimal Cost and Time-sensitive Information Diffusion in Online Social Networks, RGC GRF grant (CityU 9041886), HK\$645,500, 1 Sept 2013 – 31 Aug 2016.
- 5) Data Integrity Auditing and Access Control for Cloud Storage Systems, RGC GRF grant (CityU 114112), HK\$700,000, 1 Sept 2012 – 31 Aug 2015.
- 6) 压缩传感在无线传感器网络应用中的关键技术研究 (Algorithmic Issues of Using Compressive Sensing in Wireless Sensor Networks), NSF China (Grant No. 61173137), RMB\$590,000, Jan 2012 – Dec 2015.
- 7) Minimal Cost Deployment of Multi-radio and Multi-rate Wireless Mesh Networks with QoS Requirements in Indoor Environment, funded by RGC RGF grant (No. CityU 114710), HK\$652,671, Jan 11 - Dec 13.

- 8) 多信道多收发器传感器网络的低时延数据分发、聚合和收集研究 (Low Latency Data Dissemination, Aggregation and Collection in Multi-Radio and Multi-Channel Wireless Sensor Networks), funded by NSF China, RMB\$290,000, Jan 2010 – Dec 2012.
- 9) Minimum Latency Transmission Scheduling for Multi-radio, Multi-channel and Multi-hop Wireless Networks, funded by CityU SRG (grant No. 7008041), HK\$180,000, Sept 09 – Aug 2011.
- 10) The Impact of Multiple Radios and Multiple Channels on Communication Latency in Multihop Wireless Networks, funded by CityU SRG (grant No. 7002359), HK\$180,000, Sept 08 – Aug 10.
- 11) Max-Lifetime Sleep Scheduling for Surveillance Applications of Wireless Sensor Networks, funded by RGC CERG grant (CERG No. CityU 114307), HK\$871,200, Jan 08 - Dec 10.
- 12) 可信移动互联网络的关键理论与应用研究 (Trustworthy Mobile Internetwork: Theory and Applications), NSF China Key Project, RMB\$2,000,000, Jan 2007 – Dec 2010.
- 13) Topology Control of Wireless Mesh Networks, consultant project funded by Huawei Technology Co Ltd, HK\$400,000, Jul 2007 – Jun 2009.
- 14) Minimum Latency Communication Schedules for Information Dissemination and Aggregation in Wireless Ad Hoc and Sensor Networks, funded by RGC CERG grant (CERG No. CityU 114006), HK\$876,780, Jan 07 - Dec 09.
- 15) Energy Efficient Query Dissemination and Real-time Data Aggregation in Wireless Sensor Networks, funded by RGC CERG grant (CERG No. CityU 114505), HK\$378,700, Jan 06 – Dec 07.
- 16) Virtual Backbone Construction in Multihop Ad Hoc Wireless Networks, funded by RGC CERG grant (CERG No. CityU 1149/04E), HK\$339,414, Dec 04 – Nov 06.
- 17) Data Replication and Consistency Control in Content Distribution Networks (CDN)s, funded by CityU SRG (grant No. 7001590), HK\$178,000, Sept 04 – Aug 06.
- 18) Proxy placement and data replication for content distribution networks, funded by RGC CERG grant (CERG No. CityU 1209/03E), Co-I: Andy Yao, HK\$324,000, Dec 03 – Nov 05.
- 19) Proxy Server Selection under Budget Constraint for CDNs, funded by CityU Strategic Research Grant (No.7001438), HK\$197,000, Sept 03 – Aug 05.
- 20) Web 代理最优安放与数据对象最优复制方法研究 (Optimal Web Proxy Placement and Data Replications in CDNs) funded by NSF China (grant No. 60273071), RMB\$76,000, Jan 2003 – Dec 2003.
- 21) Adaptive and Efficient QoS Multicast Routing Methods for Mobile Ad Hoc Networks (MANETs), funded by RGC CERG grant (CERG No. CityU 1079/02E), HK\$413,404, Dec 02 – Nov 04.
- 22) QoS multicast routing and topology control for ad hoc networks, funded by CityU Strategic Research Grant (No.7001346), HK\$247,660, Sept 02 – Aug 04.
- 23) Placement of Proxies for Mirrored Web Servers, funded by CityU Strategic Research Grant (No.7001182), HK\$249,425, Sept 01 – Aug 03.
- 24) Real-time Multicast Routing in WDM Networks, funded by CityU Strategic Research Grant (No. 7001121, 7001297 with C.H.Lee), HK\$250,000, Oct 00 – Sept 02.
- 25) Routing and Wavelength Assignment for Multicast Communications in WDM networks, funded by CityU Strategic Research Grant (No.7001035), HK\$279,816, Sept 00 – Aug 02.
- 26) Co-PI, Dynamic Steiner Problems for Group Communications, funded by RGC Competitive Earmarked Research Grant (CERG No. 9040445), HK\$405,000, Dec 99 – Nov 01.
- 27) A real-time distributed unconstrained cooperative editing system, funded by RGC Competitive Earmarked Research Grant (CERG No.9040442), HK\$425,000, Sept 99 – Aug 01.

- 28) Real-time multicast connection establishment in ATM networks, funded by British Council & RGC (No. 9050128), HK\$78,000, Jul 99 – Jun 00.
- 29) A real-time multicast connection establishment scheme for high speed networks, funded by CityU Strategic Research Grant (No. 7000927), HK\$279,000, Feb 99 – Jul 01.
- 30) Multi-rate Switching Networks, funded by CityU Strategic Research Grant (No. 7000778), HK\$270,000, Aug 98 – Jul 2000.
- 31) Real-time multicast communications, funded by CityU Strategic Research Grant (No. 7000677), HK\$267,450, Aug 97 – Jul 1999.
- 32) Real-time multicast channel establishment, funded by Small Scale Research Grant (No. 9030528) at City U of HK, HK\$39,690, 1996 – 97.
- 33) A hierarchy framework for designing distributed systems, funded by CityU Strategic Research Grant (No. 7000641) at City U of HK, HK\$308,000, Jan 97 – Dec 98.
- 34) A Tool Box for Automatic Operating System Kernel Construction, 92 – 94.
- 35) Group Communication Mechanisms in Distributed System, 1993 – 1995.
- 36) A reliable architecture for building distributed systems, funded by Australian Research Council (ARC) grant (No. A4941290), AUS\$17,200, 1993 - 1995.
- 37) A New Computational Model for Concurrent and Parallel Processing (1992), funded by New Staff Research Grant at the Univ. of Queensland, AUS\$27,000, 1992.

### **Patents**

- 1) 无线网络规划方法及装置, 专利号: 2009101501374, 2009, China.
- 2) 选择网络节点加入网络的方法及其通信设备, 专利号: 2009101904252, 2009, China

## Refereed Journal Articles

- [1] Kan Yang, Ren Kui, Xiaohua Jia, "Secure and Verifiable Policy Update Outsourcing for Big Data Access Control in the Cloud ," *IEEE Trans. on Parallel and Distributed Systems*, 2014 (accepted).
- [2] Ruitao Xie, Yonggang Wen, Xiaohua Jia, "Supporting Seamless Virtual Machine Migration via Named Data Networking in Cloud Data Center," *IEEE Trans. on Parallel and Distributed Systems*, 2014 (accepted).
- [3] Baolei Cheng, Jianxi Fan, Xiaohua Jia, "Dimensional-Permutation-Based Independent Spanning Trees in Bijective Connection Networks", *IEEE Trans. on Parallel and Distributed Systems*, 2014 (accepted).
- [4] Kan Yang and Xiaohua Jia, "Expressive, Efficient and Revocable Data Access Control for Multi-Authority Cloud Storage", *IEEE Trans. on Parallel and Distributed Systems*, 25(7): 1735-1744, Jul 2014.
- [5] Yanan Chang, Qin Liu, and Xiaohua Jia, "A Data Rate and Concurrency Balanced Approach for Broadcast in Wireless Mesh Networks", *IEEE Transactions on Wireless Communications*, Vol.13, No.7, pp. 3556-3566, July 2014.
- [6] Ruitao Xie, Xiaohua Jia, "Transmission Efficient Clustering Method for Wireless Sensor Networks using Compressive Sensing", *IEEE Trans on Parallel and Distributed Systems*, Vol. 25, No. 3, Mar 2014, pp. 806-815.
- [7] Kan Yang, Xiaohua Jia, Kui Ren, Bo Zhang, Ruitao Xie: DAC-MACS: Effective Data Access Control for Multiauthority Cloud Storage Systems. *IEEE Transactions on Information Forensics and Security* 8(11): 1790-1801 (2013).
- [8] Weifa Liang, Xiaojiang Ren, Xiaohua Jia, Xu Xu, "Monitoring Quality Maximization Through Fair Rate Allocation in Harvesting Sensor Networks", *IEEE Trans on Parallel and Distributed Systems*, Vol. 24, No. 9, Sept 2013, pp. 1827-1840.
- [9] Kan Yang, Xiaohua Jia, "An Efficient and Secure Dynamic Auditing Protocol for Data Storage in Cloud Computing," *IEEE Trans. on Parallel and Distributed Systems*, Vol. 24, No. 9, Sept 2013, pp. 1717-1726.
- [10] Baolei Cheng, Jianxi Fan, Xiaohua Jia, Shukui Zhang, "Independent spanning trees in crossed cubes", *Information Sciences*, Vol. 233, 2013, pp. 276-289.
- [11] Zhang Bo, Xiaohua Jia, "Multi-hop Collaborative Relay Networks with Consideration of Contention Overhead of Relay Nodes in IEEE 802.11 DCF", *IEEE Trans. on Communications*, 61(2), 2013, pp. 532-540.
- [12] Gary Wong, Xiaohua Jia, "An Efficient Scheduling Scheme for Hybrid TDMA and SDMA systems with Smart Antennas in WLANs", *Wireless Networks*, 19(2), 2013, pp. 259-271.
- [13] Jun Zhang, Xiaohua Jia, Yuan Zhou, "Analysis of Capacity Improvement by Directional Antennas in Wireless Sensor Networks", *ACM Trans. on Sensor Networks*, Vol. 9, Iss. 1, Nov 2012.
- [14] Shouling Ji, Zhipeng Cai, Yingshu Li, and Xiaohua Jia, "Continuous Data Collection Capacity of Dual-Radio Multi-Channel Wireless Sensor Networks", *IEEE Trans on Parallel and Distributed Systems*, Vol. 23, No. 10, Oct 2012, pp. 1844-1855.

- [15] Rui Tan, Guoliang Xing, Benyuan Liu, Jianping Wang and Xiaohua Jia, "Exploiting Data Fusion to Improve the Coverage of Wireless Sensor Networks", *IEEE/ACM Trans. on Networking*, Vol. 20, No. 2, Apr 2012, pp 450-462.
- [16] Kan Yang, Xiaohua Jia, "Data storage auditing service in cloud computing: challenges, methods and opportunities", *World Wide Web*, Vol. 15, No. 4, Apr 2012, pp. 409-428.
- [17] Yan Wang, Jianxi Fan, Guodong Zhou, Xiaohua Jia, "Independent spanning trees on twisted cubes", *Journal of Parallel and Distributed Computing*, Vol. 72, Iss. 1, Jan 2012, pp. 58-69.
- [18] Liming Xie, Xiaohua Jia, Kunxiao Zhou, "QoS multicast routing in cognitive radio ad hoc networks", *Journal of Communication Systems*, 25(1), 2012, pp. 30-46.
- [19] Liu Hai, Xiaowen Chu, Yiu-Wing Leung, Xiaohua Jia, Peng-Jun Wan, "General Maximal Lifetime Sensor-Target Surveillance Problem and Its Solution", *IEEE Trans on Parallel and Distributed Systems*, Vol. 22, No. 10, Oct 2011, pp.1757-1765.
- [20] Maggie X. Cheng, Xuan Gong, Lin Cai, Xiaohua Jia, "Cross-Layer Throughput Optimization with Power Control in Sensor Networks", *IEEE Trans on Vehicular Technology*, Vol. 60, No. 7, Sept 2011, pp. 3300-3308.
- [21] Jun Zhang, Xiaohua Jia, Zhongming Zheng, and Yuan Zhou, "Minimizing Cost of Placement of Multi-radio and Multi-power-level Access Points with Rate Adaptation in Indoor Environment", *IEEE Trans on Wireless Communications*, Vol. 10, No. 7, Jul 2011, pp. 2186-2195.
- [22] Xi Wang, Jianxi Fan, Xiaohua Jia, Shukai Zhang, Jia Yu, "Embedding of meshes into twisted-cubes", *Information Sciences*, Vol. 181, Iss. 14, Jul 2011, pp. 3085-3099.
- [23] Jianxi Fan, Xiaohua Jia, Baolei Cheng, Jia Yu, "An Efficient Fault-Tolerant Routing Algorithm in Bijective Connection Networks with Restricted Faulty Edges", *Theoretical Computer Science*, Vol. 412, Iss. 29, Jul 2011.
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- [26] Haiyan Cai, Xiaohua Jia, Mo Sha, "Critical Sensor Density for Partial Connectivity in Large Area Wireless Sensor Networks", *ACM Trans. on Sensor Networks*, vol. 7, iss. 4, Feb. 2011.
- [27] Qin Liu, Xiaohua Jia, Yuan Zhou, Topology Control for Multi-Channel Multi-Radio Wireless Mesh Networks Using Directional Antennas, *Wireless Networks*, vol. 17, no. 1, Jan 2011, pp.41 - 51.
- [28] G. Xing, J. Wang, Z. Yuan, R. Tan, L. Sun, Q. Huang, X. Jia and H. C. So, "Mobile Scheduling for Spatiotemporal Detection in Wireless Sensor Networks", *IEEE Trans. on Parallel and Distributed Systems*, Vol. 21, No. 12, Dec 2010, pp.1851-1866.
- [29] [Scott C.-H. Huang](#), [Min-Te Sun](#), [Qilian Liang](#), [Peng-Jun Wan](#), Xiaohua Jia, "Interference-Aware, Fully-Distributed Virtual Backbone Construction and its Application in Multi-Hop Wireless Networks", *IEEE Trans on Communications*, 58(12), Dec 2010, pp.3550-3560.
- [30] N. Xiong, Xiaohua Jia, L. T. Yang, A.V. Vasilakos, Y. Li and Y. Pan, "A Distributed Efficient Flow Control Scheme for Multirate Multicast Networks", *IEEE Trans on Parallel and Distributed Systems*, Vol. 21, No. 9, Sep 2010, pp.1254-1266.
- [31] Jun Zhang, Xiaohua Jia, Guoliang Xing, "Real-Time Data Aggregation in Contention-based Wireless Sensor Networks", *ACM Trans. on Sensor Networks*, vol 7, iss 1, Aug 2010, pp. 25 pages.

- [32]Guoliang Xing, Minming Li, Hongbo Lou, Xiaohua Jia, “Dynamic Multi-resolution Data Dissemination in Wireless Sensor Networks”, *IEEE Trans. on Mobile Computing*, Sep. 2009, pp.1205 - 1220.
- [33]Hejiao Huang, Xiaolu Cao, Xiaohua Jia, Xiaolong Wang: Channel assignment using block design in wireless mesh networks. *Computer Communications* 32(7-10): 1148-1153 (2009).
- [34]P.-J. Wan, C.-W. Yi, Lixin Wang, Frances Yao and Xiaohua Jia, “Asymptotic Critical Transmission Radii for Greedy Forward Routing in Wireless Ad Hoc Networks”, *IEEE Trans. on Communications*, 57(5), 2009, pp.1433-1443.
- [35][Naixue Xiong](#), [Yi Pan](#), Xiaohua Jia, [Jong Hyuk Park](#), [Yingshu Li](#): Design and analysis of a self-tuning feedback controller for the Internet. *Computer Networks* 53(11): 1784-1797 (2009).
- [36]M. Marzban, Qianping Gu, Xiaohua Jia, “Computational Study on Planar Dominating Set Problem”, *Theoretical Computer Science*, Feb, 2009.
- [37]Qin Liu, Xiaohua Jia, Chanle Wu, “Optimal precomputation for mapping service level agreements in grid computing”, *Future Generation Computer Systems*, 24, 2008, pp. 849 – 959.
- [38]Jianxi Fan and Xiaohua Jia, “Edge-Pancyclicity and Path-Embeddability of Bijective Connection Graphs”, *Information Science*, Vol. 178, No. 2, 2008, 340-351.
- [39]Jianxi Fan, Xiaohua Jia, and Xiaola Lin, “Embedding of Cycles in Twisted Cubes with Edge-Pancyclic”, *Algorithmica*, Vol. 51, No. 3, 2008, pp.264-282.
- [40]X.-J. Chen, X.-D. Hu, Xiaohua. Jia, “Inapproximability and Approximability of Minimal Tree Routing and Coloring”, *Journal of Discrete Algorithms*, 6 (2008), pp. 341-351.
- [41]Ivan Stojmenovic, Dandan Liu, Xiaohua Jia, “A scalable quorum-based location service in ad hoc and sensor networks”, *Int'l Journal of Communication Networks and Distributed Systems*, Vol. 1, No. 1, 2008, pp. 71-94.
- [42]Jianxi Fan and Xiaohua Jia, “Embedding Meshes into Crossed Cubes”, *Information Science*, Vol. 177, 2007, pp. 3151-3160.
- [43]Dandan Liu, Xiaohua Jia, and Ivan Stojmenovic, “Quorum and connected dominating sets based location service in wireless ad hoc, sensor and actuator networks”, *Computer Communication*, Vol. 30, 2007, pp.3627-3643.
- [44]Deying Li, Qin Liu, X. Hu and Xiaohua Jia, “Energy Efficient Multicast Routing in Ad Hoc Wireless Networks”, *Computer Communication*, Vol. 30, Iss. 18, Dec 2007, pp.3746-3756.
- [45]Feng Wang, Hongwei Du, Xiaohua Jia, Ping Deng, Weili Wu, David MacCallum, “Non-Unique Probe Selection and Group Testing”, *Theoretical Computer Science*, Vol. 381, Iss. 1-3, Aug 2007, pp. 29-32.
- [46]Huayi Wu and Xiaohua Jia, “QoS Multicast Routing by Using Multiple Paths/Trees in Wireless Ad Hoc Networks”, *Ad Hoc Networks*, Vol. 5, Iss. 5, Jul 2007, pp. 600-612.
- [47]Hai Liu, Xiaohua Jia, Pengjun Wan, Xinxin Liu, and Frances Yao, "A Distributed and Efficient Flooding Scheme Using 1-hop Information in Mobile Ad Hoc Networks," *IEEE Trans on Parallel and Distributed Systems*, Vol. 18, No. 5, May 2007, pp. 658-671.
- [48]Hai Liu, Xiaohua Jia, Pengjun Wan, Chihwei Yi, Sam Makki, and Niki Pissinou, “Maximizing Lifetime of Sensor Surveillance Systems”, *IEEE/ACM Trans on Networking*, Vol. 15, No. 2, Apr 2007, pp. 334-345.
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- [50]Jianxi Fan, Xiaola Lin, Yi Pan, Xiaohua Jia, “Optimal Fault-Tolerant Embedding of Paths in Twisted Cubes”, *Journal of Parallel and Distributed Computing*, Vol. 67, 2007, pp. 205-214.



- [51]Hai Liu, Pengjun Wan, Xiaohua Jia, "Maximal Lifetime Scheduling for Sensor Surveillance Systems with K Sensors to 1 Target", *IEEE Trans on Parallel and Distributed Systems*, Vol. 17, No. 12, Dec 2006, pp. 1526-1536.
- [52]Deying Li, Xiaohua Jia and Hongwei Du, "QoS Topology Control for Non-Homogenous Ad Hoc Wireless Networks", *EURASIP Journal on Wireless Communications and Networking*, 2006, pp. 19-28.
- [53]Hongwei Du, Xiaodong Hu and Xiaohua Jia, "Energy Efficient Routing and Scheduling for Real Time Data Aggregation in Wireless Sensor Networks", *Computer Communication*, Vol. 29, Iss. 17, Nov 2006, pp.3527-3535.
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- [55]Hai Liu, Pengjun Wan, and Xiaohua Jia, "Maximal Lifetime Scheduling for K to 1 Sensor-Target Surveillance Networks", *Computer Networks*, Vol. 50, 2006, pp.2839-2854.
- [56]Dandan Liu, Xiaodong Hu, and Xiaohua Jia, "Energy efficient information dissemination protocols by negotiation for wireless sensor networks", *Computer Communications*, Vol. 29, Iss. 11, July 2006, pp. 2136-2149.
- [57]Manki Min, Hongwei Du, Xiaohua Jia, Christina Xiao Huang, Scott C.-H. Huang, and Weili Wu, "Improving Construction for Connected Dominating Set with Steiner Tree in Wireless Sensor Networks", *Journal of Global Optimization*, Vol. 35, No. 1, May 2006, pp.111-119.
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- [62]Jianxi Fan, Xiaola Lin and Xiaohua Jia, "Optimal Path Embedding in Crossed Cubes", *IEEE Trans on Parallel and Distributed Systems*, Vol. 16, No. 12, Dec 2005, pp.1190-1200.
- [63]Huayi Wu, Xiaohua Jia, Y. He and C. Huang, "Bandwidth-Guaranteed QoS Routing of Multiple Parallel Paths in TDMA/CDMA Ad hoc Wireless Networks", *International Journal of Communication Systems*, Vol. 18, Issue 9, Nov 2005, pp.803-816.
- [64]Hai Liu, Xiaohua Jia, Deying Li, and C.H. Lee, "Bandwidth Guaranteed Call Admission in TDMA/CDMA Ad Hoc Wireless Networks", *Ad Hoc Networks*, No. 3, 2005, pp.689-701.
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- [66]Xiaohua Jia, D. Li, D. Du, and J. Cao, "On Optimal Replication of Data Object at Hierarchical and Transparent Web Proxies", *IEEE Trans on Parallel and Distributed Systems*, Vol. 16, No. 8, Aug 2005, pp.673-685.
- [67]Xiaohua Jia, Dongsoo Kim, Sam Makki, Pengjun Wan, and Chihwei Yi, "Power assignment for k-connectivity in wireless ad hoc networks", *Journal of Combinatorial Optimization*, Vol. 9, No. 2, Mar 2005, pp.213-222.

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- [69] L. Ruan, H. Du, X. Jia, W. Wu, Y. Li and K.-I. Ko, "A Greedy Approximation for Minimum Connected Dominating Sets", *Theoretical Computer Science*, Vol. 329, 2004, pp.325-330.
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