

List of Publications of Prof. Ruay-Shiung Chang

(A) Journal Papers(期刊論文)

- (1) Jih-Sheng Chang and Ruay-Shiung Chang, " A probabilistic cost estimation model for RFID real-time applications in data grids," to appear in *International Journal of Innovative Computing, Information and Control*.
- (2) Shou-Hung Wang and Ruay-Shiung Chang, "Deploying Mobile Nodes for Maximal Energy Matching in WSNs," to appear in *Wireless Communications and Mobile Computing*.
- (3) Ruay-Shiung Chang, Taihoon Kim, and Naveen Chilamkurti "Mobile Internet Preface," to appear in *Journal of Internet Technology*.
- (4) Ruay-Shiung Chang, Taihoon Kim, C.L. Wang, and S.L. Peng, "RFID Preface," to appear in *International Journal of Ad Hoc and Ubiquitous Computing*.
- (5) Ruay-Shiung Chang, Taihoon Kim, C.L. Wang, and S.L. Peng, "Sensor Networks Preface," to appear in *International Journal of Ad Hoc and Ubiquitous Computing*.
- (6) Ruay-Shiung Chang, D.J. Deng, and CH Ke, "Internet Resource Sharing and Discovery Preface," *Journal of Internet Technology*, Vol. 11, Issue 2, March, 2010.
- (7) Yun-Sheng Yen, Hung-Chieh Chang, Ruay-Shiung Chang and Han-Chieh Chao, "Routing with Adaptive Path and Limited Flooding for Mobile Ad Hoc Networks," *Computers and Electrical Engineering*, Vol. 36, Issue 2, pp. 280-290, March 2010. (SCI)
- (8) Ruay-Shiung Chang, Chun-Fu Lin and Shih-Chun Hsi, " Accessing Data from Many Servers Simultaneously and Adaptively in Data Grids," Vol. 26, Issue 1, *Future Generation Computer Systems*, Jan. 2010, pp. 63-71.
- (9) Ruay-Shiung Chang and Min-Shuo Hu, "A Resource Discovery Tree Using Bitmap for Grids," Vol. 26, Issue 1, *Future Generation Computer Systems*, Jan. 2010, pp. 29-37.
- (10) Ruay-Shiung Chang, "Rich men's conferences: Stop the trend," *IEEE Computer*, Volume: 42, Issue: 10, Pages: 7-7, OCT 2009.
- (11) Der-Jiunn Deng, Rung-Shiang Cheng, Heng-Jia Chang, Hui-Tang Lin, and Ruay-Shiung Chang, "A Cross-Layer Congestion and Contention Window Control Scheme for TCP Performance Improvement in Wireless LANs," *Telecommunication Systems*, Volume: 42, Issue: 1-2, Pages: 17-27, OCT 2009. (SCI)
- (12) Kuei-Ping Shih, Der-Jiunn Deng, Ruay-Shiung Chang and Hung-Chang Chen, "On Connected Target Coverage for Wireless Heterogeneous Sensor Networks with Multiple Sensing Units," *Sensors* July 2009, 9(7), 5173-5200. (SCI)
- (13) Chia Ming Wu, Hsin Chou Chi, and Ruay Shiung Chang, "Mapping and Scheduling Algorithms for Circuit-Switched Network-on-Chip Architecture," *ETRI Journal*. vol.31, no.2, Apr. 2009, 111-120. (SCI)

- (14) Y.S. Yen, S. Hong, R.S. Chang, and H.C. Chao, "Controlled deployments for wireless sensor networks," *IET Communications*, Volume 3, Issue 5, p. 820-829, May 2009. (SCI)
- (15) Reen-Cheng Wang, Yao-Chung Chang, and Ruay-Shiung Chang, "Design issues of semantic service discovery for ubiquitous computing," *Journal of Intelligent Manufacturing*, Vol. 20, No. 3, pp. 327-335, June 2009. (SCI)
- (16) Ruay-Shiung Chang, Jih-Sheng Chang and Po-Sheng Lin, "An Ant Algorithm for Balanced Job Scheduling in Grids," *Future Generation Computer Systems*, Vol. 25, Issue 1, Jan. 2009, pp. 20-27. (SCI)
- (17) Wu-Chun Chung and Ruay-Shiung Chang, "A New Mechanism for Resource Monitoring in Grid Computing," *Future Generation Computer Systems*, Vol. 25, Issue 1, Jan. 2009, pp. 1-7. (SCI)
- (18) Ruay-Shiung Chang, Ming-Huang Guo, and Hau-Chin Lin, "A Multiple Parallel Download Scheme with Server Throughput and Client Bandwidth Considerations for Data Grids," *Future Generation Computer Systems*, Vol. 24, Issue 8, Oct. 2008, pp. 798-805. (SCI)
- (19) Jih-Sheng Chang and Ruay-Shiung Chang, "An Innovative Replica Consistency Decision Model with Naive Bayesian Classifier in Data Grids," *Journal of Chinese Institute of Engineers*, Vol. 31, No. 7, Nov. 2008, pp. 1101-1111. (SCI)
- (20) Ruay-Shiung Chang and Hui-Ping Chang, "A dynamic data replication strategy using access-weights in data grids," *Journal of Supercomputing*, Vol. 45, Issue 3, Sept. 2008, pp. 277-295. (SCI)
- (21) Y.S. Yen, C.S. Liao, H.C. Chao, and R.S. Chang, "Flooding-Limited for Multi-Constrained QoS Routing Protocol in Mobile Ad Hoc Networks," *IET Communications*, Volume 2, Issue 7, August 2008 Page(s):972 – 981. (SCI)
- (22) Ruay-Shiung Chang and Chia-Jou Kuo, "Using maximum energy cluster head for routing in wireless sensor networks," *Journal of Internet Technology*, Vol. 9, No. 3, July, 2008. (SCI)
- (23) Ruay-Shiung Chang and Shuo-Hung Wang, "Self-deployment by density control in sensor networks," *IEEE Trans. Vehicular Technology*, Vol. 57, Issue 3, May 2008, pp. 1745-1755. (SCI)
- (24) Reen-Cheng Wang and Ruay-Shiung Chang, "Cross-layer binding update for TCP performance enhancement over mobile IPv6 networks," *IET communications*, Vol. 1, Issue 5, Oct. 2007, pp. 924-932. (SCI)
- (25) Ruay-Shiung Chang, Jih-Sheng Chang, and Shin-Yi Lin, "Job scheduling and data replication on data grids," *Future Generation Computer Systems*, Volume 23, Issue 7, August 2007, Pages 846-860. (SCI)
- (26) Ruay-Shiung Chang and Chun-Fu Lin, "Using Link Layer Throughput Maximization in Ad Hoc Network Routing Algorithms," *IET communications*, Vol. 1, Issue 5, Oct. 2007, pp. 875-879. (SCI)

- (27) Ruay-Shiung Chang and Po-Hung Chen, "Complete and fragmented replica selection and retrieval in data grids," *Future Generation Computer Systems*, Volume 23, Issue 4, May 2007, Pages 536-546. (SCI)
- (28) Ruay-Shiung Chang and Chang-Zhou Tsai, "Adding Sense of Spatial Locality to Routing Protocols for Mobile Ad Hoc Networks," *Wireless Communications and Mobile Computing*, Vol. 7, No. 3, March 2007, pp. 299-310. (SCI)
- (29) Ruay-Shiung Chang and An-Chin Lee, "An energy efficient data query architecture for large scale sensor networks," *IEICE Trans. Communications*, vol. E-90B, no. 2, 2007, pp. 217-227. (SCI)
- (30) Chia-Shien Lu and Ruay-Shiung Chang, "A fast handoff method in mobile IPv6 using prerouting," *Wireless Communications and Mobile Computing*, Vol. 6 Issue 5, 673-690, August, 2006. (SCI)
- (31) Seiven Leu and Ruay-Shiung Chang, "A fast and scalable IPv4&v6 address lookup algorithm," *Computer Communications*, Volume 29, Issue 16, 12 October 2006, Pages 3020-3036 (SCI)
- (32) Tsung-Wen Hsieh and Ruay-Shiung Chang, "Bluegon: A Polygon-Shaped Scatternet Formation Algorithm for Bluetooth," *Wireless Communications and Mobile Computing*, 6 (4), 439-451, June 2006. (SCI)
- (33) S.Y. Wu, S.J. Leu and R.S. Chang, "An agent-based architecture for resource reservation in mobile IP networks," *International Journal of Computers and Applications*, Vol. 27, Issue 4, 2005, pp. 266-273. (EI)
- (34) Chun-Chieh Huang, Ming-Huang Guo, and Ruay-Shiung Chang, "A Weight-Based Clustering Multicast Routing Protocol for Mobile Ad Hoc Networks," *International Journal of Internet Protocol Technology*, Vol. 1, No. 1, 2005, pp. 10-18
- (35) R.S. Chang, C.H. Lin, and C.M. Wang, "A Bluetooth home network architecture and its scatternet routing," *Journal of Internet Technology*, Vol. 6, No. 3, 2005. (EI)
- (36) R.S. Chang and M.T. Chou, "Blueline: a distributed Bluetooth scatternet formation and routing algorithm," *Journal of Information Science and Engineering*, 21 (3), 479-494, May 2005. (SCI).
- (37) R.S. Chang and Y.S. Yen, "A multicast routing protocol with dynamic tree adjustment for mobile IPv6," *Journal of Information Science and Engineering*, vol. 20, no. 6, Nov. 2004, pp. 1109-1124. (SCI)
- (38) S.J. Leu and R.S. Chang, "Handoff ordering using signal strength for wireless multimedia communications," *IEEE Trans. Wireless Communications*, vol. 3, no. 5, Sept. 2004, pp. 1526-1532. (SCI, EI)
- (39) R.S. Chang and W.W. Chen, "Mobility assessment on-demand routing protocol for mobile ad-hoc networks," *Wireless Communications and Mobile Computing*, Vol. 4, Issue 4, June 2004, pp. 369-381. (SCI)

- (40) R.S. Chang and H.Y. Lu, "Predictive Resource Reservation in Wireless Cellular Networks," *IEICE Trans. Communications*, Vol. E86-B, No. 12, December 2003, pp. 3538-3543. (SCI, EI)
- (41) H.S. Ting and R.S. Chang, "Improving the performance of broadcasting in ad hoc wireless networks," *Journal of Internet Technology*, Vol. 4, No. 4, Oct. 2003, pp. 209-216. (EI)
- (42) S.J. Leu and R.S. Chang, "Integrated Service Mobile Internet: RSVP over Mobile IPv4&6," *Mobile Networks and Applications*, Vol. 8, No. 6, December 2003, pp. 635-642. (SCI, EI)
- (43) R.S. Chang, W.Y. Chen and Y.F. Wen, "Hybrid Wireless Network Protocols," *IEEE Trans. Vehicular Technology*, Vol. 52, No. 4, July 2003, pp. 1099-1109. (SCI,EI)
- (44) R.S. Chang and C.T. Hsieh, "Uplink Channel Assignment with Balanced Load for Code Division Multiple Access Cellular Systems," *Wireless Communications and Mobile Computing*, Vol. 3, Issue 1, 2003, pp. 63-72. (SCI)
- (45) C.F. Koh, S.J. Leu, R.S. Chang, and W.N. Yang, Supporting QoS in Networks with Mobile Hosts, *Journal of Computers*, Vol. 12, No. 2, June 2000, pp. 46-54.
- (46) R. S. Chang and A. Chu, Supporting Quality of Service Communications for Mobile Hosts with Advanced Resource Reservations, *Journal of Internet Technology*, Vol. 1, No. 1, July 2000, pp. 1-10. (EI)
- (47) D.J. Deng and R.S. Chang, A Non-Preemptive Priority Based Access Control Scheme for Broadband Ad-Hoc Wireless ATM Local Area Networks, *IEEE J. Selected Areas on Communications*, Vol. 18, Issue 9, Sept. 2000, pp. 1731-1739. (SCI, EI)
- (48) R.S. Chang, K.J. Pai, and C.L. Chen, Design of a multiple leaky buckets shaper, *Computer Communications*, Vol. 23. No. 13, 15 July 2000, pp.1307-1318. (SCI,EI)
- (49) R.S. Chang and P.C. Chiou, Reducing database sizes in implicit deregistration for personal communication networks, *Computer Communications*, Vol. 23. No. 13, 15 July 2000, pp.1301-1306. (SCI,EI)
- (50) C.L. Chen and R.S. Chang, A new dynamic bandwidth allocation scheme for MPEG videos in ATM networks, *Computer Communications*, Vol. 23, 2000, pp. 1505-1513. (SCI,EI)
- (51) R.S. Chang, Jump Number Optimization for Graph Vertices Sequences, *Information Sciences* 115 (1999) 103-122. (SCI,EI)
- (52) R.S. Chang, Review of "Future codes: essays in advanced computer technology and the law", *Computer Communications* 22 (1999) 1275. (SCI, EI)
- (53) R.S. Chang and C.D. Wang, Improved WWW multimedia transmission performance in HTTP/TCP over ATM networks, *IEEE Trans. on Multimedia*, Vol. 1, No. 3, 1999, pp.278-290. (SCI, EI)
- (54) M.H. Guo and R.S. Chang, Design Issues for Multicast ATM Switches, *Computer Communications*, Vol. 22, No. 9, 1999, pp. 771-777. (SCI,EI)
- (55) J.D. Lin and R.S. Chang, A self-adaptive load balanced Internet Multicast Routing protocol, *European Transactions on Telecommunications*, Vol. 10, No. 3, May/June, 1999. (SCI, EI)

- (56) M.H. Guo and R.S. Chang, A Simple Multicast ATM switch based on broadcast buses, *IEICE Trans. on Communications*, Vol. E82-B, No. 6, June 1999. (SCI, EI)
- (57) M.H. Guo and R.S. Chang, Multicast ATM switches based on input cells scheduling, *IEICE Trans. on Communications*, Vol. E82-B, No. 4, April 1999, pp. 600-607. (SCI, EI)
- (58) D.J. Deng and R.S. Chang, A Priority Scheme for IEEE 802.11 DCF Access Method, *IEICE Trans. on Communications*, Vol. E82-B, No. 1, Jan. 1999, pp. 96-102. (SCI, EI)
- (59) J.D. Lin and R.S. Chang, A Comparison of Internet Multicast Routing Protocols, *Computer Communications*, 22 (2), 1999, pp. 144-155. (SCI, EI)
- (60) C.L. Chen and R.S. Chang, Dynamic Priority Transmission Mechanism for DQDB, *Computer Communications*, 22 (5), 1999, pp.483-490. (SCI, EI)
- (61) G.C. Lai and R.S. Chang, Supporting QoS in IP over ATM, *Computer Communications*, 22(5), 1999 pp. 411-418. (SCI, EI)
- (62) C.L. Chen and R.S. Chang, Dual Bus Architecture for HFC Networks with Interactive VOD as an Application Example, *IEICE Trans. Communications*, Vol. E81-B, No. 10, Oct. 1998, pp.1803-1810. (SCI,EI)
- (63) M.H. Guo and R.S. Chang, Multicast ATM Switches: Survey and Performance Evaluation, *ACM Computer Communication Review*, vol. 28, no. 2, 1998, 98-131.
- (64) P.H. Chu and R.S. Chang, A community VOD system based on a dual bus architecture, *Computer Communications*, 21(1998) 65-80. (SCI,EI)
- (65) R.S. Chang and W.D. Kuo, Adaptation to Network Link Bandwidth Fluctuation in WWW, *Journal of Chinese Institute of Engineers*, Vol. 21, No. 1, 1998, 59-72. (SCI, EI)
- (66) C.W. Tsai and R.S. Chang, SNMP through WWW, *International Journal of Network Management*, Vol. 8, pp.104-119, 1998. (EI)
- (67) R.S. Chang and D.J. Chiang, Load balancing based on routing strategies, *Journal of Chinese Institute of Electric Engineers*. Vol. 5, No. 4, 1998, pp. 313-323. (EI)
- (68) R.S. Chang and S.J. Leu, The minimum labeling spanning trees, *Information Processing Letters* 63(1997) 277-282. (SCI,EI)
- (69) C.S. Wang and R.S. Chang, A parallel maximal cliques algorithm for interval graphs with applications, *Journal of Information Science and Engineering*, Vol. 13, No. 4, pp. 649-663, 1997. (SCI)
- (70) L.C. Wei and R.S. Chang, Broadcast scheduling in packet radio networks by hopfield neural networks, *Information Processing Letters* 63(1997) 271-276. (SCI,EI)
- (71) R.S. Chang, Global Internet: The Next Japanese Miracle, *IEEE Internet Computing*, May/June, pp. 83-84, 1997. (SCI)
- (72) R.S. Chang, Internet in Asia, China: Poised to Take off, *IEEE Internet Computing*, March/April, pp. 78-80, 1997. (SCI)
- (73) R.S. Chang, Internet in Asia, Taiwan: Education leads the way, *IEEE Internet Computing*,

January/February, p.86, 1997. (SCI)

- (74) J.A. Chen and R.S. Chang, A distributed link scheduling algorithm for CDMA packet radio networks, *International Journal of Wireless Information Networks*, Vol. 2, No. 2, pp. 61-70, 1995. (SCI,EI)
- (75) J.Y. Hsiao, C.Y. Tang, R.S. Chang, and R.C.T. Lee, Single step searching in weighted block graphs, *Information Sciences*, Vol. 81, pp. 1-29, 1994. (SCI,EI)
- (76) R.S. Chang, A simple algorithm for finding a maximum clique, *Journal of Computers*, Vol. 5, No. 1, pp. 1-3, 1993.
- (77) R.S. Chang, An optimal algorithm for edge searching an interval graph, *Journal of Information Sciences and Engineering*, Vol.9, No.3, pp. 421-430, 1993. (SCI)
- (78) Y.L. Wang, R.S. Chang, and C.C. Hsu, The tour problems in two-terminal series parallel graphs, *Information Sciences*, 72(1993), 179-189. (SCI,EI)
- (79) J.Y. Hsiao, C.Y. Tang, and R.S. Chang, An efficient algorithm for solving the maximum weight 2-independent set problem on interval graphs, *Information Processing Letters*, Vol. 43,p. 229-235,1992. (SCI,EI)
- (80) J.Y. Hsiao, C.Y. Tang, and R.S. Chang, The summation and bottleneck minimization for single step search problems on weighted graphs, *Information Sciences*, 74(1993), 1-28. (SCI,EI)
- (81) J.Y. Hsiao, C.Y. Tang, and R.S. Chang, Solving the single step graph searching problem by solving the maximum two-independent set problem, *Information Processing Letters* 40(1991), pp. 283-287. (SCI,EI)
- (82) R.S. Chang, Single step graph searching problem, *Information Processing Letters* 40(1991), pp. 107-111. (SCI,EI)
- (83) R.S. Chang and R.C.T. Lee, The continuous working problem, *Discrete Applied Mathematics* 28(1990), pp.93-109. (SCI,EI)
- (84) R.S. Chang and R.C.T. Lee, On a scheduling problem where a job can be executed only by a limited number of processors, *Computer and Operations Research*, Vol. 15, No. 5, pp.471-478, 1988. (SCI,EI)

(Book Chapters)

- (1) Ruay-Shiung Chang and Shou-Hung Wang, "Deployment Strategies for Wireless Sensor Networks," in *Handbook of Research on Developments and Trends in Wireless Sensor Networks: From Principle to Practice*, edited by Jin Hai and Wenbin Jiang, to appear.
- (2) Ruay-Shiung Chang and Jih-Sheng Chang," Pervasive Grid and Its Applications," in *Handbook of Research on Scalable Computing Technologies*, edited by Kuan-Ching Li, Ching-Hsien Hsu, Laurence T. Yang, Jack Dongarra and Hans Zima, 2010.

- (3) Ruay-Shiung Chang and Chun-Fu Lin, "Data Replications in Data Grids," in *Recent Developments in Grid Technology and Applications*, edited by G.A. Gravvanis, J.P. Morrison, H.R. Arabnia and D.A. Power, 2010.
- (4) M.H. Guo and R.S. Chang, "A Multicast ATM Switch Based on Broadcast Buses," in *High-Performance Backbone Network Technology*, edited by Naoaki Yamanaka, Marcel Dekker, Inc. 2005.
- (5) Y.S. Yen, C.S. Liao, R.S. Chang, and H.C. Chao, "An Energy-Aware Quality of Services Routing Protocol in Mobile Ad Hoc Networks," *Lecture Note on Computer Science*, 2006, vol. 4138, pp. 586-596.
- (6) R.C. Wang, S.L. Wu, and R.S. Chang, "A novel data grid coherence protocol using PAC method," *Lecture Note on Computer Science*, vol. 4459, 2007, pp. 484-495.
- (7) R.C. Wang, S.L. Wu, and R.S. Chang, "Enhancing data replication with greedy pipeline-based aggressive copy protocol in data grids," *Lecture Note on Computer Science*, vol. 4742, 2007, pp. 633-644.

(Publications in ACM Computing Reviews)

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(B) Conference Papers(研討會論文)

- (1) R.S. Chang and Y.L. Wang, On a resource allocation and consumption problem, *Proceedings of National Computer Symposium 1989*, Taipei, Taiwan, ROC, Dec.15-16, 1989, pp.9-14.
- (2) R.S. Chang, Multipartite negotiation decision support systems, *Proceedings of International Computer Symposium 1992*, Taichung, Taiwan, ROC, 1992, pp. 1205-1210.
- (3) R.S. Chang, A weighted job assignment problem and #P-complete result, *Proc. of the 3rd International Conference for Young Computer Scientists*, July 15-17, Beijing, China, 1993.
- (4) C.L. Chen and R.S. Chang, A distributed load balancing algorithm based on spanning trees, *Proc. 7th SIAM Parallel Processing Conference*, pp. 639-640, 1995.
- (5) W.T. Chen, Y.W. Deng, C.P. Wang, N.F. Huang, H.C. Lin, C.C. Lu, and R.S. Chang, On the Design of a High-Performance ATM Bridge, *IEEE First International Conference on ATM*, Colmar, France, June, 1998.
- (6) R.S. Chang and M.H. Guo, Supporting Multicast with Multicast ATM Switches in ATM UNI 3.0/3.1, *SoftCom 2000*, Croatia.
- (7) Sheng-Lung Peng, Hsiao-An Chao, and Ruay-Shiung Chang, On the Maximum Connected Interval Subgraph of Block Graphs and Chain Graphs, *ICS 2000, Workshop on Algorithms*.
- (8) R.S. Chang and J.K. Ko, Improving PRMA/DA performance over wireless ATM local area

networks, *the 2nd International Conference on Parallel and Distributed Computing, Applications, and Techniques*, 2001, Taipei, Taiwan, pp. 180-187.

- (9) R.S. Chang and G.C. Chen, "A Bluetooth scatternet formation algorithm using neighbor information," SCI 2004, Orlando, USA.
- (10) R.S. Chang and C.F. Lin, "A survey of routing algorithms for wireless ad hoc networks," Global Mobile Congress 2004, Shanghai, China. (EI)
- (11) Ruay-Shiung Chang, Jih-Sheng Chang, Wu-Chun Chung, and Ning-Yuan Huang, "Implementation and evaluation of NDHU grid system," Proceedings of 2nd Workshop on Grid Technology and Applications, Hualien, Taiwan, 2005.
- (12) Yun-Sheng Yen, Hung-Chieh Chang, Ruay-Shiung Chang, and Han-Chieh Chao, "Routing with adaptive path and limited flooding for mobile ad-hoc networks," International Symposium of Wireless Pervasive Computing, Jan. 16-18, Phuket, Thailand, 2006.
- (13) Ruay-Shiung Chang and Shing-Juan Leu, "QoS routing with received signal strength for ad hoc networks," International Symposium of Wireless Pervasive Computing, Jan. 16-18, Phuket, Thailand, 2006.
- (14) R.S. Chang and J.S. Chang, "Adaptable replica consistency service for data grids," Third International Conference on Information Technology: New Generations, April 2006, Las Vegas, USA.
- (15) R.S. Chang, "A stable link index for mobile ad hoc network routing algorithms," Global Mobile Congress, Oct. 2006, Beijing, China.
- (16) R.C. Wang, Y.C. Chang, R.S. Chang, and H.C. Chi, "Non-specific application sharing in access grid," TANET 2006, Hualien, Taiwan.
- (17) R.S. Chang and J.H. Chang, "E-campus system based on the pervasive grid," TANET 2006, Hualien, Taiwan.
- (18) Wu-Chun Chung, Ming-Huang Guo, and Ruay-Shiung Chang, "An Information Retrieving Protocol for Resource Monitoring in Grid Computing," ICS 2006, Taiyuan, Taiwan.
- (19) Ruay-Shiung Chang, Ning-Yuan Huang and Jih-Sheng Chang, "A Predictive Algorithm for Replication Optimization in Data Grids," ICS 2006, Taiyuan, Taiwan.
- (20) Ruay-Shiung Chang and Chun-Fu Lin, "A Resource Discovery and Allocation Mechanism in Large Computational Grids for Media Applications," The Second International Workshop on Parallel and Distributed Multimedia Computing, in conjunction with International Symposium on Parallel and Distributed Processing and Application (ISPA 2007), August 28 - September 1, 2007, Niagara Falls, Ontario, Canada.
- (21) Reen-Cheng Wang and Ruay-Shiung Chang, "Internetworking between Zigbee/802.15.4 and IPv6/802.3 Network," SIGCOMM 2007 IPv6 Workshop, Aug. 27-31, Japan, 2007.
- (22) Ruay-Shiung Chang, Jih-Sheng Chang, and Po-Sheng Lin, "Balanced Job Assignment Based on Ant Algorithm for Computing Grids," 2007 IEEE Asia-Pacific Services Computing Conference (IEEE APSCC 2007), Tsukuba, Japan, December 11-14.

- (23) Ruay-Shiung Chang, Hau-Chin Lin, and Ming-Huang Guo, "Parallel Downloads Considering Server Throughput and Client Bandwidth," Proceedings of 3rd Workshop on Grid Technology and Applications, Taichung, Taiwan, 2007.
- (24) Ruay-Shiung Chang and Shuo-Hung Wang, "Hexagonal Collaboration Group in Sensor Networks," Fifth IEEE Consumer Communications & Networking Conference (CCNC 2008), 10 - 12 January 2008, Las Vegas, Nevada, USA.
- (25) Ruay-Shiung Chang, Chun-Fu Lin, Jiing-Hsing Ruey and Shih-Chun His, "An Efficient and Bandwidth Sensitive Parallel Download Scheme in Data Grids," THE THIRD International Conference on COMMunication System softWARE and MiddlewaRE (COMSWARE), Bangalore, India, January 5-10, 2008.
- (26) Chi Shih et al., "Middleware of Taiwan Unigrid," the 23rd Annual ACM Symposium on Applied Computing, Fortaleza, Ceara, Brazil, March 16 - 20, 2008.
- (27) Ruay-Shiung Chang, Chun-Fu Lin, and Jen-Jom Chen, "Selecting the Most Fitting Resource for Task Execution in Grids," Second International Conference on Information Systems, Technology, and Management, Dubai, UAE, March 6-8, 2008.
- (28) Ruay-Shiung Chang, Chun-Fu Lin and Min-Shuo Hu, "Hierarchical Resource Discoveries for Grids," HPC Asia, March 2009, Kaoshiung, Taiwan.
- (29) Ruay-Shiung Chang, Chih-Yuan Lin, and Chun-Fu Lin, "Scheduling Jobs in Grids Adaptively," ISPA, August 2009, Chengdu, China.
- (30) Ruay-Shiung Chang and Jih-Sheng Chang, "A Mobile Personalized RFID System," EUPS, August 2009, Indianapolis, USA.
- (31) Yun-Sheng Yen, Ruay-Shiung Chang and Sin-Lung Ke, "An Energy-Efficient Clustering Protocol for Wireless Sensor Networks," in *Proc. of the IEEE 2010 the 2nd International Conference on Computer and Network Technology (ICCNT 2010)*, Bangkok, Thailand, April 23 - 25, 2010
- (32) Yun-Sheng Yen and Ruay-Shiung Chang, "A Seamless Handoff Scheme for IEEE 802.11 Wireless Networks", Chinacom 2010.
- (33) Chia-Ming Wu and Ruay-Shiung Chang, "Green virtual network for cloud computing," Chinacom 2010.
- (34) Chia-Ming Wu, Ruay-Shiung Chang, and Chang-Chih Chen, "A complex event processing method for based on pregrouping for RFID streams," IET FC 2010.