

Selected Journal Publications

1. Y. Wei, X. Wang, L. Fialho, R. Bruschi, O. Ormond, M. Collier, "[Hierarchical Power Management Architecture and the Optimal Local Control Policy for Energy Efficient Networks](#)", Journal of Communications and Networks, vol. 18, no. 4, August 2016, pp. 540-550.
2. F. Guo, X. Wang, M Song, Y. Wei, O. Ormond and M Collier, "[Greening the NetFPGA Reference Router](#)", Energies 2016, 9(7), 500; doi:10.3390/en9070500.
3. S. Hu, C. Tang, F. Liu, X. Wang, "[A Distributed and Efficient System Architecture for Smart Home](#)", International Journal of Sensor Networks, Vol. 20, No. 2, 2016. pp.110-130.
4. YL Wang, YF Wei, YL Teng, M Song, XJ Wang, "[Joint Routing and Resource Management in Energy Harvesting Aided Wireless Mesh Backhaul Networks](#)", Journal of Internet Technology, Vol. 16 No. 6, pp.1121-1131 (2015/11)
5. D. Yuan, M. Song, Y. Teng, D. Ma Ding, X. Wang, G. Lu, "[QoE-oriented resource allocation for multiuser-multiservice femtocell networks](#)", China Communications, Vol12 , Issue 10, Oct. 2015. pp. 27 – 41.
6. S. Hu, F Liu, C Tang, X Wang, H Zhou, "[Assessing Chinese campus building energy performance using fuzzy analytic network process](#)", Journal of Intelligent & Fuzzy Systems 29 (2015), pp. 2629–2638.
7. Y. Zhou , G. Xu, Y. Wang, X. Wang, "[Chaotic map-based time-aware multi-keyword search scheme with designated server](#)", Wireless Communications and Mobile Computing, Dec 2015.
8. X. Wang, B. Liu, J. Jiang, Y. Xu, Y. Wang, X. Wang, "[Kangaroo: Accelerating String Matching by Running Multiple Collaborative Finite State Machines](#)", IEEE J. Sel. Areas Commun. - Special Issue on Deep Packet Inspection: Algorithms, Hardware, and Applications, vol. 32, no. 10, Oct. 2014.
9. X. Wang, B. Cronin, "[TCP/IP Reassembly in Network Intrusion Detection and Prevention Systems](#)", International Journal of Information Security and Privacy, 8(3), 63-76, July-September 2014.
10. C. Sun, W. Wang, Y. Zhang, X. Wang, "[Distributed 2-hop proportional fair resource allocation in LTE-Advanced networks](#)", Wireless Communications and Mobile Computing, 2014, DOI: 10.1002/wcm.2517.
11. X. Zheng, X. Wang, "[Comparative Study of Power Consumption of a NetFPGA-Based Forwarding Node in Publish-Subscribe Internet Routing](#)", Computer Communications, Elsevier, Vol. 44, 15 May 2014, pp. 36–43.
12. A. Kennedy, X. Wang, "[Ultra-High Throughput Low-Power Packet Classification](#)", IEEE Trans. Very Large Scale Integr. (VLSI) Syst., vol. 22, no. 2, pp. 286 – 299, 11 Feb 2014. Dol: 10.1109/TVLSI.2013.2241798.
13. C. Sun, W. Wang, G. Cui, X. Wang, "[Service-aware bidirectional throughput optimisation route selection strategy in LTE-Advanced networks](#)", IET Networks, Jan 2014, DOI: 10.1049/iet-net.2012.0191.
14. L. Kong, Y. Wang, Y. Wei, H. Wang, Yi Man, X. Wang, "[SDEC: Spectrum-aware Degree-ranking-based Energy-Efficient Clustering Algorithm for Multi-hop CRN](#)", Pervasive Computing and the Networked World, Lecture Notes in Computer Science Volume 8351, 2014, pp 230-240.
15. Y. Wei, Y. Teng, L. Wang, M. Song, X. Wang, "[QoS Provisioning Energy Saving Dynamic Access Policy for Overlay Cognitive Radio Networks with Hidden Markov Channels](#)", China Communications, Vol 10, Issue 12, 2013, pp:92-101.
16. B. Cronin, X. Wang, "[Hardware Acceleration of Regular Expression Repetitions in Deep Packet Inspection](#)", IET Information Security, Vol.7, Iss 4, Dec. 2013, pp. 327 – 335.
17. B. Cronin, X. Wang, "[Pattern Overlap in Bit-Parallel Implementation of Regular Expression Repetition Quantifiers](#)", Int. J. Security and Networks, Vol. 8, No. 4, 2013, pp.231-238.
18. S. Zheng, C. Yang, E. A. Hendriks, X. Wang, "[Adaptive Weighted Least Squares Svm Based Snowing Model For Image Denoising](#)", International Journal of Wavelets, Multiresolution and Information Processing (IJWMIP), Vol. 11, No. 6, Nov. 2013, World Scientific Publishing Company.
19. X. Wang, Y. Xu, J. Jiang, O. Ormond, B. Liu and X. Wang, "[StriFA: Stride Finite Automata for High-Speed Regular Expression Matching in Network Intrusion Detection Systems](#)", IEEE Syst. J., vol 7, issue 2, pp. 374 – 384, Sept 2013.
20. M. Zhao, T. Luo, C. Yin, G. Yue, X. Wang, "[Dynamic Spectrum Management with Competitive Market Equilibrium](#)", Journal of Networks, Vol 8, No 2 (2013), Feb 2013, pp.283-289.
21. M. Zhao, C. Yin, X. Wang, "[A Novel Dynamic Spectrum Access Algorithm for Cognitive Radio Networks](#)", Journal of Communications and Networks, Vol. 15, No. 1, Feb 2013, pp.38-44.

22. L. Zhou, B. Geller, X. Wang, B. Zheng, and H.-C. Chao, "[Multi-User Video Streaming over Multiple Heterogeneous Wireless Network - A Distributed, Cross-Layer Design Paradigm](#)," Journal of Internet Technology, Vol. 10, No. 1 (2009/01), pp1-12.