

Selected Journal Publications

1. K. Javeed, X. Wang, "[Low latency flexible FPGA implementation of point multiplication on elliptic curves over GF\(p\)](#)", International Journal of Circuit Theory and Applications, 7 Dec 2016, DOI: 10.1002/cta.2295.
2. Y. Zhou F. Wang, F. Tang, X. Wang, "[Cellular automata based secure distributed storage scheme with integrity proof](#)", Elsevier Computers and Electrical Engineering, <http://dx.doi.org/10.1016/j.compeleceng.2016.11.004>.
3. T. Song, Z. Jiang, Y. Wei, X. Shi, X. Ma, O. Ormond, M. Collier, and X. Wang, "[Traffic aware Energy Efficient Router: Architecture, Prototype and Algorithms](#)", IEEE Journal on Selected Areas in Communications, 12 August 2016, DOI: [10.1109/JSAC.2016.2600063](https://doi.org/10.1109/JSAC.2016.2600063).
4. 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.
5. 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](https://doi.org/10.3390/en9070500).
6. 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.
7. 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)
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
 23. 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.
 24. 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.