

Xiaojun Wang

List of Publications by Year in descending order

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140
papers

1,319
citations

430442

18
h-index

476904

29
g-index

143
all docs

143
docs citations

143
times ranked

1061
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly power-efficient quantum cascade lasers. <i>Nature Photonics</i> , 2010, 4, 95-98.	15.6	150
2	Multilevel pattern mining architecture for automatic network monitoring in heterogeneous wireless communication networks. <i>China Communications</i> , 2016, 13, 108-116.	2.0	80
3	Low power architecture for high speed packet classification. , 2008, , .		49
4	A novel quantum image steganography algorithm based on exploiting modification direction. <i>Multimedia Tools and Applications</i> , 2019, 78, 7981-8001.	2.6	47
5	High performance hardware support for elliptic curve cryptography over general prime field. <i>Microprocessors and Microsystems</i> , 2017, 51, 331-342.	1.8	44
6	Low latency flexible FPGA implementation of point multiplication on elliptic curves over $GF(p)$. <i>International Journal of Circuit Theory and Applications</i> , 2017, 45, 214-228.	1.3	42
7	Universal quantum computation with qudits. <i>Science China: Physics, Mechanics and Astronomy</i> , 2014, 57, 1712-1717.	2.0	38
8	Parallel Photonic Quantum Computation Assisted by Quantum Dots in One-Side Optical Microcavities. <i>Scientific Reports</i> , 2014, 4, 5732.	1.6	34
9	Quantum Image Steganography Protocol Based on Quantum Image Expansion and Grover Search Algorithm. <i>IEEE Access</i> , 2019, 7, 50849-50857.	2.6	33
10	A secure controlled quantum image steganography algorithm. <i>Quantum Information Processing</i> , 2020, 19, 1.	1.0	32
11	Matrix Coding-Based Quantum Image Steganography Algorithm. <i>IEEE Access</i> , 2019, 7, 35684-35698.	2.6	31
12	Effect of quantum noise on deterministic remote state preparation of an arbitrary two-particle state via various quantum entangled channels. <i>Quantum Information Processing</i> , 2017, 16, 1.	1.0	29
13	Serial and parallel interleaved modular multipliers on FPGA platform. , 2015, , .		26
14	FPGA Based High Speed SPA Resistant Elliptic Curve Scalar Multiplier Architecture. <i>International Journal of Reconfigurable Computing</i> , 2016, 2016, 1-10.	0.2	23
15	A high-speed RSD-based flexible ECC processor for arbitrary curves over general prime field. <i>International Journal of Circuit Theory and Applications</i> , 2018, 46, 1858-1878.	1.3	23
16	An Efficient V2I Authentication Scheme for VANETs. <i>Mobile Information Systems</i> , 2018, 2018, 1-11.	0.4	21
17	Single-mode quantum cascade lasers based on a folded Fabry-Perot cavity. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	20
18	Radix-4 and radix-8 booth encoded interleaved modular multipliers over general F . , 2014, , .		20

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19	Geometry of Quantum Computation with Qudits. Scientific Reports, 2015, 4, 4044.	1.6	20
20	An Enhanced Privacy-Preserving Authentication Scheme for Vehicle Sensor Networks. Sensors, 2017, 17, 2854.	2.1	20
21	Redundant-Signed-Digit-Based High Speed Elliptic Curve Cryptographic Processor. Journal of Circuits, Systems and Computers, 2019, 28, 1950081.	1.0	20
22	Ultra-High Throughput Low-Power Packet Classification. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 286-299.	2.1	16
23	Energy efficient packet classification hardware accelerator. Parallel and Distributed Processing Symposium (IPDPS), Proceedings of the International Conference on, 2008, , .	1.0	15
24	Hybrid quantum-state joining and splitting assisted by quantum dots in one-side optical microcavities. Physical Review A, 2015, 91, .	1.0	15
25	A distributed and efficient system architecture for smart home. International Journal of Sensor Networks, 2016, 20, 119.	0.2	15
26	A survey of dynamic power optimization techniques. , 0, , .		14
27	Quantum private comparison based on quantum dense coding. Science China Information Sciences, 2016, 59, 1.	2.7	13
28	Improved quantum ripple-carry addition circuit. Science China Information Sciences, 2016, 59, 1.	2.7	13
29	Teleportation of a ququart system using hyperentangled photons assisted by atomic-ensemble memories. Physical Review A, 2016, 93, .	1.0	13
30	Keep Forwarding Path Freshest in VANET via Applying Reinforcement Learning. , 2019, , .		13
31	StriD²FA: Scalable Regular Expression Matching for Deep Packet Inspection. , 2011, , .		12
32	Multi-Factorial Energy Aware Resource Management in Edge Networks. IEEE Transactions on Green Communications and Networking, 2019, 3, 45-56.	3.5	12
33	Greedy Tree Growing Heuristics on Block-Test Scheduling Under Power Constraints. Journal of Electronic Testing: Theory and Applications (JETTA), 2004, 20, 61-78.	0.9	10
34	Comparative study of power consumption of a NetFPGA-based forwarding node in publish“subscribe Internet routing. Computer Communications, 2014, 44, 36-43.	3.1	10
35	Deterministic generations of quantum state with no more than six qubits. Quantum Information Processing, 2015, 14, 901-920.	1.0	10
36	Lattice-based public-key encryption with conjunctive keyword search in multi-user setting for IloT. Cluster Computing, 2022, 25, 2305-2316.	3.5	10

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37	Multi-Engine Packet Classification Hardware Accelerator. , 2009, , .		9
38	StriFA: Stride Finite Automata for High-Speed Regular Expression Matching in Network Intrusion Detection Systems. IEEE Systems Journal, 2013, 7, 374-384.	2.9	9
39	Intelligent coal mine monitoring system based on the Internet of Things. , 2013, , .		9
40	Kangaroo: Accelerating String Matching by Running Multiple Collaborative Finite State Machines. IEEE Journal on Selected Areas in Communications, 2014, , 1-1.	9.7	9
41	Hybrid Toffoli gate on photons and quantum spins. Scientific Reports, 2015, 5, 16716.	1.6	9
42	Design and Performance Comparison of Modular Multipliers Implemented on FPGA Platform. Lecture Notes in Computer Science, 2016, , 251-260.	1.0	9
43	Unified quantum no-go theorems and transforming of quantum pure states in a restricted set. Quantum Information Processing, 2017, 16, 1.	1.0	9
44	The effect of quantum noise on two different deterministic remote state preparation of an arbitrary three-particle state protocols. Quantum Information Processing, 2018, 17, 1.	1.0	9
45	Anti-Noise Bidirectional Quantum Steganography Protocol with Large Payload. International Journal of Theoretical Physics, 2018, 57, 1903-1927.	0.5	9
46	A Low-Cost Self-Test Architecture Integrated With PRESENT Cipher Core. IEEE Access, 2019, 7, 46045-46058.	2.6	9
47	Secure Video Streaming with Lightweight Cipher PRESENT in an SDN Testbed. Computers, Materials and Continua, 2018, 57, 353-363.	1.5	9
48	Power consumption analysis of a NetFPGA based router. Journal of China Universities of Posts and Telecommunications, 2012, 19, 94-99.	0.8	8
49	Efficient montgomery multiplier for pairing and elliptic curve based cryptography. , 2014, , .		8
50	Efficient atomic and photonic multipartite W state concentration via photonic faraday rotation. European Physical Journal D, 2014, 68, 1.	0.6	7
51	Assessing Chinese campus building energy performance using fuzzy analytic network approach. Journal of Intelligent and Fuzzy Systems, 2015, 29, 2629-2638.	0.8	7
52	QoE-oriented resource allocation for multiuser-multiservice femtocell networks. China Communications, 2015, 12, 27-41.	2.0	7
53	Hierarchical power management architecture and optimal local control policy for energy efficient networks. Journal of Communications and Networks, 2016, 18, 540-550.	1.8	7
54	Quantum Computation Based on Photons with Three Degrees of Freedom. Scientific Reports, 2016, 6, 25977.	1.6	7

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55	Chaotic map-based time-aware multi-keyword search scheme with designated server. <i>Wireless Communications and Mobile Computing</i> , 2016, 16, 1851-1858.	0.8	7
56	Power-constrained block-test list scheduling. , 2000, , .		6
57	An efficient scheduling mechanism with flow-based packet reordering in a high-speed network processor. , 0, , .		6
58	Revisiting the Cache Effect on Multicore Multithreaded Network Processors. , 2008, , .		6
59	Hardware acceleration of regular expression repetitions in deep packet inspection. <i>IET Information Security</i> , 2013, 7, 327-335.	1.1	6
60	Universal remote quantum computation assisted by the cavity input-output process. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015, 471, 20150274.	1.0	6
61	Traffic Aware Energy Efficient Router: Architecture, Prototype and Algorithms. <i>IEEE Journal on Selected Areas in Communications</i> , 2016, 34, 3814-3827.	9.7	6
62	A Performance Comparison of the PRESENT Lightweight Cryptography Algorithm on Different Hardware Platforms. , 2018, , .		6
63	Power Analysis of Packet Classification on Programmable Network Processors. , 2007, , .		5
64	TCP/IP Reassembly in Network Intrusion Detection and Prevention Systems. <i>International Journal of Information Security and Privacy</i> , 2014, 8, 63-76.	0.6	5
65	Energy saving local control policy for Green Reconfigurable Routers. , 2015, , .		5
66	Analysis and Optimization of Multihop Broadcast Communication in the Internet of Vehicles Based on C-V2X Mode 4. <i>IEEE Sensors Journal</i> , 2022, 22, 12428-12443.	2.4	5
67	Flow mapping in the load balancing parallel packet switches. , 0, , .		4
68	Ultra-high throughput string matching for Deep Packet Inspection. , 2010, , .		4
69	End-to-end QoS guaranteed seamless handover scheme for cognitive heterogeneous networks. , 2010, , .		4
70	Dynamic frequency scaling architecture for energy efficient router. , 2012, , .		4
71	EABF: Energy efficient self-adaptive Bloom filter for network packet processing. , 2012, , .		4
72	Power measurement of NetFPGA based router. , 2012, , .		4

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73	Wavelength selection and spectral narrowing of distributed Bragg reflector quantum cascade lasers up to peak optical power. Optics Express, 2013, 21, 31012.	1.7	4
74	Efficient Quantum Transmission in Multiple-Source Networks. Scientific Reports, 2014, 4, 4571.	1.6	4
75	Towards efficient and scalable data mining using spark. , 2014, , .		4
76	Controlled Photon Switch Assisted by Coupled Quantum Dots. Scientific Reports, 2015, 5, 11169.	1.6	4
77	Distributed atomic quantum information processing via optical fibers. Scientific Reports, 2017, 7, 1234.	1.6	4
78	Joint Optimization of Multi-Hop Broadcast Protocol and MAC Protocol in Vehicular Ad Hoc Networks. Sensors, 2021, 21, 6092.	2.1	4
79	Splitting an Arbitrary Three-Qubit State via a Five-Qubit Cluster State and a Bell State. Entropy, 2022, 24, 381.	1.1	4
80	ADAPTIVE WEIGHTED LEAST SQUARES SVM BASED SNOWING MODEL FOR IMAGE DENOISING. International Journal of Wavelets, Multiresolution and Information Processing, 2013, 11, 1350043.	0.9	3
81	Energy evaluation of gigabit routers towards energy efficient network. , 2014, , .		3
82	Energy-efficient operation of a network of OpenFlow switches featuring hardware acceleration and frequency scaling. Transactions on Emerging Telecommunications Technologies, 2019, 30, e3619.	2.6	3
83	PAMI-Anonymous Password Authentication Protocol for Medical Internet of Things. , 2021, , .		3
84	Distribution-graph based approach and extended tree growing technique in power-constrained block-test scheduling. , 0, , .		2
85	SimNP. , 2008, , .		2
86	Extraction of fingerprint from regular expression for efficient prefiltering. , 2009, , .		2
87	An improved implementation of Montgomery algorithm using efficient pipelining and structured parallelism techniques. , 2010, , .		2
88	Energy efficient cooperative relaying and cognitive radio technologies to deliver green communication. , 2011, , .		2
89	Energy Saving Dynamic Relaying Scheme in Wireless Cooperative Networks Using Markov Decision Process. , 2012, , .		2
90	Typical universal entanglers. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1913-1917.	2.0	2

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91	Adaptive partial frequency reuse in LTE-Advanced relay networks. , 2015, , .		2
92	Generations of N-atom GHZ state and 2^n n -atom W state assisted by quantum dots in optical microcavities. Quantum Information Processing, 2015, 14, 3661-3676.	1.0	2
93	Greening the NetFPGA Reference Router. Energies, 2016, 9, 500.	1.6	2
94	Distributed Photonic Quantum Computations Assisted by Atomic Ensembles. IEEE Journal of Quantum Electronics, 2016, 52, 1-8.	1.0	2
95	Distributed two-hop proportional fair resource allocation in Long Term Evolution Advanced networks. Wireless Communications and Mobile Computing, 2016, 16, 264-278.	0.8	2
96	Cellular automata based secure distributed storage scheme with integrity proof. Computers and Electrical Engineering, 2017, 59, 291-304.	3.0	2
97	Flow-table updating strategy for efficient use of renewable energy in software defined wireless relay networks. Journal of Communications and Networks, 2017, 19, 605-617.	1.8	2
98	Introduction to the special issue on deep learning for Biomedical and healthcare applications. Neural Computing and Applications, 2018, 30, 2015-2016.	3.2	2
99	Outsourced Mutual Private Set Intersection Protocol for Edge-Assisted IoT. Security and Communication Networks, 2021, 2021, 1-11.	1.0	2
100	C2BF: Cache-based Counting Bloom Filter for Precise Matching in Network Packet Processing. Procedia Engineering, 2012, 29, 3747-3754.	1.2	1
101	Optimizing energy-efficiency for program partitioning and mapping onto multi-core packet processing systems. Journal of China Universities of Posts and Telecommunications, 2012, 19, 79-86.	0.8	1
102	AQ-learning approach for mobility robustness optimization in Lte-Son. , 2013, , .		1
103	Pattern overlap in bit-parallel implementation of regular expression repetition quantifiers. International Journal of Security and Networks, 2013, 8, 231.	0.1	1
104	Service-aware bidirectional throughput optimisation route selection strategy in long-term evolution advanced networks. IET Networks, 2014, 3, 259-266.	1.1	1
105	A flexible and robust wireless home network structure. International Journal of Sensor Networks, 2016, 21, 116.	0.2	1
106	An overview of phishing attacks and their detection techniques. International Journal of Internet Protocol Technology, 2016, 9, 187.	0.2	1
107	A Randomness Detection Method of ZigBee Protocol in a Wireless Sensor Network. Sensors, 2018, 18, 3962.	2.1	1
108	PROGRES: A Programmable Green Router With Controlled Service Rate. IEEE Access, 2019, 7, 143792-143804.	2.6	1

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109	Joint Power Control and User Association Strategy in Green HetNets Using Deep Q-Network with LSTM. , 2019, , .		1
110	Energy-efficiency-aware flow-based access control in HetNets with renewable energy supply. International Journal of Computational Science and Engineering, 2020, 21, 437.	0.4	1
111	Fuzzy approach to multimedia faulty module replacement. , 1999, , .		0
112	Aliasing-free space and time compactions with limited overhead. , 0, , .		0
113	Branch prediction for network processors. , 2008, , .		0
114	A Scalable Bloom Filter Based Prefilter and Hardware-Oriented Predispatcher. , 2009, , .		0
115	Field-Based Branch Prediction for Packet Processing Engines. , 2009, , .		0
116	An Efficient Scheme for Access Selection over a Novel Green Heterogeneous Network Architecture. , 2011, , .		0
117	A channel hopping based MAC without hidden terminal problem for cognitive networks. , 2011, , .		0
118	Measurements on movie distribution behavior in Peer-to-Peer networks. , 2011, , .		0
119	Multiuser power control with competitive market equilibrium. , 2012, , .		0
120	Tag-DFA for Improved DFA Compression in Deep Packet Inspection. Procedia Engineering, 2012, 29, 3755-3762.	1.2	0
121	Find the Right Transaction Length for Stream Mining : A Distance Approach. , 2014, , .		0
122	Information Security Risk Assessment Method based on Cloud Model. , 2014, , .		0
123	Pattern Mining Model for Automatic Network Monitoring in Heterogeneous Wireless Communication Networks. , 2014, , .		0
124	The research and implementation of web information extraction technology based on multi-level pages. , 2014, , .		0
125	Low power design for on-chip networking processing system. , 2015, , .		0
126	A Frequency Scalable Publish-Subscribe Forwarding Node. , 2015, , .		0

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127	Green Precision Time Protocol Router Using Dynamic Frequency Scaling. Lecture Notes in Computer Science, 2016, , 104-115.	1.0	0
128	A programmable energy efficient 40 Gb/s switch using frequency scaling and OpenFlow. , 2017, , .		0
129	The impact of networking algorithms on the power consumption of routers. Energy Efficiency, 2018, 11, 189-201.	1.3	0
130	Energy efficient virtual network embedding for wireless multi-hop cellular networks using multi-commodity flow algorithm. International Journal of Sensor Networks, 2019, 29, 203.	0.2	0
131	Distributed spectrum-sharing in cognitive ad hoc networks using evolutionary game theory. International Journal of Sensor Networks, 2019, 30, 184.	0.2	0
132	Energy-aware compilation for network processors: frameworks, techniques and trend. , 2008, , .		0
133	Frequency scaling for multidimensional packet classifiers. , 2008, , .		0
134	Dynamic Spectrum Management with Competitive Market Equilibrium. Journal of Networks, 2013, 8, .	0.4	0
135	Scalable Distributed Address Assignment for Low Rate Wireless Personal Area Network. Journal of Computers, 2013, 8, .	0.4	0
136	SDEC: Spectrum-Aware Degree-Ranking-Based Energy-Efficient Clustering Algorithm for Multi-hop CRN. Lecture Notes in Computer Science, 2014, , 230-240.	1.0	0
137	<title>Color-to-speech sensory substitution device for the visually impaired</title>. , 1997, , .		0
138	Green Energy Forecast Based on Improved Grey Model for Green Base Stations. Lecture Notes in Computer Science, 2016, , 12-22.	1.0	0
139	A Decentralized Multi-agent Reinforcement Learning Approach for Resource Sharing and Allocation in Renewable Energy Powered Wireless Networks. Communications in Computer and Information Science, 2020, , 640-651.	0.4	0
140	Redactable Blockchain Trust Scheme Based on Reputation Consensus for MEC. Computational Intelligence and Neuroscience, 2022, 2022, 1-14.	1.1	0