Ing-Ray Chen

List of Publications by Year
in descending order

103 papers	3,976 citations	201575 27 h-index	133188 59 g-index
104 all docs	104 docs citations	104 times ranked	3056 citing authors

#	Article	IF	Citations
1	Hierarchical Trust Management for Wireless Sensor Networks and its Applications to Trust-Based Routing and Intrusion Detection. IEEE Transactions on Network and Service Management, 2012, 9, 169-183.	3.2	359
2	Trust Management for SOA-Based IoT and Its Application to Service Composition. IEEE Transactions on Services Computing, 2016, 9, 482-495.	3.2	326
3	Trust-Based Service Management for Social Internet of Things Systems. IEEE Transactions on Dependable and Secure Computing, 2016, 13, 684-696.	3.7	289
4	A survey of trust computation models for service management in internet of things systems. Computer Communications, 2017, 97, 1-14.	3.1	241
5	Adaptive Intrusion Detection of Malicious Unmanned Air Vehicles Using Behavior Rule Specifications. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 593-604.	5.9	170
6	Behavior Rule Specification-Based Intrusion Detection for Safety Critical Medical Cyber Physical Systems. IEEE Transactions on Dependable and Secure Computing, 2015, 12, 16-30.	3.7	166
7	A survey of intrusion detection in wireless network applications. Computer Communications, 2014, 42, 1-23.	3.1	165
8	Dynamic Trust Management for Delay Tolerant Networks and Its Application to Secure Routing. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 1200-1210.	4.0	162
9	A Survey of Mobile Cloud Computing Applications: Perspectives and Challenges. Wireless Personal Communications, 2015, 80, 1607-1623.	1.8	149
10	Effect of Intrusion Detection and Response on Reliability of Cyber Physical Systems. IEEE Transactions on Reliability, 2013, 62, 199-210.	3.5	132
11	Behavior-Rule Based Intrusion Detection Systems for Safety Critical Smart Grid Applications. IEEE Transactions on Smart Grid, 2013, 4, 1254-1263.	6.2	123
12	Scalable, adaptive and survivable trust management for community of interest based Internet of Things systems. , 2013, , .		123
13	Modeling and analysis of trust management with trust chain optimization in mobile ad hoc networks. Journal of Network and Computer Applications, 2012, 35, 1001-1012.	5.8	105
14	A Survey on Modeling and Optimizing Multi-Objective Systems. IEEE Communications Surveys and Tutorials, 2017, 19, 1867-1901.	24.8	104
15	Modeling and Analysis of Attacks and Counter Defense Mechanisms for Cyber Physical Systems. IEEE Transactions on Reliability, 2016, 65, 350-358.	3.5	83
16	Trust-Based Service Management for Mobile Cloud IoT Systems. IEEE Transactions on Network and Service Management, 2019, 16, 246-263.	3.2	73
17	BRIoT: Behavior Rule Specification-Based Misbehavior Detection for IoT-Embedded Cyber-Physical Systems. IEEE Access, 2019, 7, 118556-118580.	2.6	56
18	Effect of Intrusion Detection on Reliability of Mission-Oriented Mobile Group Systems in Mobile Ad Hoc Networks. IEEE Transactions on Reliability, 2010, 59, 231-241.	3.5	52

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19	Redundancy Management of Multipath Routing for Intrusion Tolerance in Heterogeneous Wireless Sensor Networks. IEEE Transactions on Network and Service Management, 2013, 10, 189-203.	3.2	51
20	Intrusion Detection Systems for Networked Unmanned Aerial Vehicles: A Survey. , 2018, , .		51
21	Trust management in mobile ad hoc networks for bias minimization and application performance maximization. Ad Hoc Networks, 2014, 19, 59-74.	3.4	50
22	Modeling and Analysis of Trust Management for Cognitive Mission-Driven Group Communication Systems in Mobile Ad Hoc Networks. , 2009, , .		47
23	A topic-focused trust model for Twitter. Computer Communications, 2016, 76, 1-11.	3.1	44
24	Design and Performance Analysis of Mobility Management Schemes Based on Pointer Forwarding for Wireless Mesh Networks. IEEE Transactions on Mobile Computing, 2011, 10, 349-361.	3.9	43
25	PROVEST: Provenance-Based Trust Model for Delay Tolerant Networks. IEEE Transactions on Dependable and Secure Computing, 2018, 15, 151-165.	3.7	42
26	Trust management for service composition in SOA-based IoT systems. , 2014, , .		40
27	Performance Analysis of Location-Aware Mobile Service Proxies for Reducing Network Cost in Personal Communication Systems. Mobile Networks and Applications, 2005, 10, 453-463.	2.2	38
28	CATrust: Context-Aware Trust Management for Service-Oriented Ad Hoc Networks. IEEE Transactions on Services Computing, 2018, 11, 908-921.	3.2	36
29	Admission Control Algorithms for Revenue Optimization with QoS Guarantees in Mobile Wireless Networks. Wireless Personal Communications, 2006, 38, 357-376.	1.8	35
30	Algorithms for supporting disconnected write operations for wireless Web access in mobile client-server environments. IEEE Transactions on Mobile Computing, 2002, 1, 46-58.	3.9	34
31	Performance evaluation of an admission control algorithm: dynamic threshold with negotiation. Performance Evaluation, 2003, 52, 1-13.	0.9	30
32	Dynamic quota-based admission control with sub-rating in multimedia servers. Multimedia Systems, 2000, 8, 83-91.	3.0	27
33	Dynamic Hierarchical Trust Management of Mobile Groups and Its Application to Misbehaving Node Detection. , 2014, , .		27
34	Analyzing dynamic voting using Petri nets. , 0, , .		25
35	Trust-based mechanism design for cooperative spectrum sensing in cognitive radio networks. Computer Communications, 2018, 116, 90-100.	3.1	24
36	Lightweight Misbehavior Detection Management of Embedded IoT Devices in Medical Cyber Physical Systems. IEEE Transactions on Network and Service Management, 2020, 17, 2496-2510.	3.2	23

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37	Trust Management of Smart Service Communities. IEEE Access, 2019, 7, 26362-26378.	2.6	22
38	Performance optimization of region-based group key management in mobile ad hoc networks. Performance Evaluation, 2008, 65, 319-344.	0.9	21
39	Trust management for the internet of things and its application to service composition. , 2012, , .		20
40	Mobility Management in Wireless Mesh Networks Utilizing Location Routing and Pointer Forwarding. IEEE Transactions on Network and Service Management, 2012, 9, 226-239.	3.2	19
41	Reliability Analysis of Wireless Sensor Networks with Distributed Code Attestation. IEEE Communications Letters, 2012, 16, 1640-1643.	2.5	19
42	Trust-Based Task Assignment With Multiobjective Optimization in Service-Oriented Ad Hoc Networks. IEEE Transactions on Network and Service Management, 2017, 14, 217-232.	3.2	19
43	Attack and Defense Strategies for Intrusion Detection in Autonomous Distributed IoT Systems. IEEE Access, 2020, 8, 168994-169009.	2.6	19
44	On Survivability of Mobile Cyber Physical Systems with Intrusion Detection. Wireless Personal Communications, 2013, 68, 1377-1391.	1.8	18
45	A Mobile Cloud Hierarchical Trust Management Protocol for IoT Systems. , 2017, , .		16
46	Trust-based data fusion mechanism design in cognitive radio networks. , 2014, , .		15
47	On optimal batch rekeying for secure group communications in wireless networks. Wireless Networks, 2008, 14, 915-927.	2.0	14
48	Behavior Rule Based Intrusion Detection for Supporting Secure Medical Cyber Physical Systems. , 2012, , .		14
49	On IoT Misbehavior Detection in Cyber Physical Systems. , 2018, , .		14
50	Misbehavior detection of embedded IoT devices in medical cyber physical systems. , 2018, , .		14
51	Integrated Social and QoS Trust-Based Routing in Delay Tolerant Networks. Wireless Personal Communications, 2012, 66, 443-459.	1.8	13
52	DMAP: integrated mobility and service management in mobile IPv6 systems. Wireless Personal Communications, 2007, 43, 711-723.	1.8	12
53	A hierarchical performance model for intrusion detection in cyber-physical systems. , 2011, , .		12
54	Adaptive Network Defense Management for Countering Smart Attack and Selective Capture in Wireless Sensor Networks. IEEE Transactions on Network and Service Management, 2015, 12, 451-466.	3.2	12

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55	Online Social Deception and Its Countermeasures: A Survey. IEEE Access, 2021, 9, 1770-1806.	2.6	11
56	Trust-Based IoT Cloud Participatory Sensing of Air Quality. Wireless Personal Communications, 2019, 105, 1461-1474.	1.8	10
57	Reliability of Autonomous Internet of Things Systems With Intrusion Detection Attack-Defense Game Design. IEEE Transactions on Reliability, 2021, 70, 188-199.	3.5	10
58	Integrated social and quality of service trust management of mobile groups in ad hoc networks. , 2013, , .		8
59	Regional Registration-Based Mobile Multicast Service Management in Mobile IP Networks. Wireless Personal Communications, 2010, 54, 635-649.	1.8	7
60	Analysis and Comparison of Location Strategies for Reducing Registration Cost in PCS Networks. Wireless Personal Communications, 2000, 12, 117-136.	1.8	6
61	Hierarchical Agent-Based Secure Multicast for Wireless Mesh Networks. , 2011, , .		6
62	Reliability assessment of framework-based distributed embedded software systems. , 0, , .		5
63	Effect of redundancy on the mean time to failure of wireless sensor networks. Concurrency Computation Practice and Experience, 2007, 19, 1119-1128.	1.4	5
64	Modeling and analysis of intrusion detection integrated with batch rekeying for dynamic group communication systems in mobile ad hoc networks. Wireless Networks, 2010, 16, 1157-1173.	2.0	5
65	Trust-Based Task Assignment in Autonomous Service-Oriented Ad Hoc Networks. , 2015, , .		5
66	On design tradeoffs between security and performance in wireless group communicating systems. , 0, , .		4
67	APPCCM: Adaptive per-user per-object cache consistency management for mobile client-server applications in wireless mesh networks. , 2010, , .		4
68	A Comparative Analysis of Trust-based Service Composition Algorithms in Service-Oriented Ad Hoc Networks. , 2017, , .		4
69	COSTA: Composite Trust-Based Asset-Task Assignment in Mobile Ad Hoc Networks. IEEE Access, 2019, 7, 92296-92313.	2.6	4
70	Optimizing the Lifetime of IoT-Based Star and Mesh Networks. IEEE Access, 2020, 8, 63090-63105.	2.6	4
71	Title is missing!. Distributed and Parallel Databases, 2003, 14, 199-219.	1.0	3
72	Adaptive QoS Control Based on Benefit Optimization for Video Servers Providing Differentiated Services. Multimedia Tools and Applications, 2005, 25, 167-185.	2.6	3

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73	Extending Proxy Caching Capability: Issues and Performance. World Wide Web, 2006, 9, 253-275.	2.7	3
74	Model-Based Evaluation of Distributed Intrusion Detection Protocols for Mobile Group Communication Systems. Wireless Personal Communications, 2011, 60, 725-750.	1.8	3
75	A hierarchical cloud architecture for integrated mobility, service, and trust management of service-oriented IoT systems. , 2016, , .		3
76	Network Adaptations Under Cascading Failures for Mission-Oriented Networks. IEEE Transactions on Network and Service Management, 2019, 16, 1184-1198.	3.2	3
77	Performance characterization of forwarding strategies in personal communication networks. , 0, , .		2
78	On Optimal Key Disclosure Interval for μTESLA: Analysis of Authentication Delay versus Network Cost. , 0, , .		2
79	DMAP-FR: Dynamic Mobility Anchor Points for Mobility, Service and Failure Recovery Management in Mobile IPv6 Systems. Wireless Personal Communications, 2012, 62, 479-496.	1.8	2
80	Smart Routers for Cross-Layer Integrated Mobility and Service Management in Mobile IPv6 Systems. Wireless Personal Communications, 2013, 69, 449-469.	1.8	2
81	Trust-Based Multi-objective Optimization for Node-to-Task Assignment in Coalition Networks. , 2013, , .		2
82	Dynamic multisource multipath routing for intrusion tolerance and lifetime maximization of autonomous wireless sensor networks. , 2013, , .		2
83	Vulnerability-Aware Resilient Networks: Software Diversity-Based Network Adaptation. IEEE Transactions on Network and Service Management, 2021, 18, 3154-3169.	3.2	2
84	Update propagation algorithms for supporting disconnected operations in mobile wireless systems with data broadcasting. , 0, , .		1
85	Optimization of Batch Rekey Interval for Secure Group Communications in Wireless Networks. , 0, , .		1
86	DMAP: A Scalable and Efficient Integrated Mobility and Service Management Scheme for Mobile IPv6 Systems. Local Computer Networks (LCN), Proceedings of the IEEE Conference on, 2006, , .	0.0	1
87	Modeling and analysis of regional registration based mobile multicast service management. , 2007, , .		1
88	Performance Analysis of Spillover-Partitioning Call Admission Control in Mobile Wireless Networks. Wireless Personal Communications, 2010, 53, 111-131.	1.8	1
89	Energy vs. QoS Tradeoff Analysis of Multipath Routing Protocols for Intrusion Tolerance in Heterogeneous Wireless Sensor Networks. , 2012, , .		1
90	Trust-based decision making for environmental health community of interest IoT systems. , 2016, , .		1

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91	Analysis of Attack-Defense Strategies in Autonomous Distributed IoT Systems. , 2019, , .		1
92	On the reliability of dependable soft real-time cooperating systems. , 0, , .		0
93	A study of self-adjusting quality of service control schemes. , 0, , .		0
94	Real-time atomic transaction processing using multi-invariant data structure. , 0, , .		0
95	Analysis of algorithms for supporting disconnected write operations in mobile client-server environments. , 0, , .		0
96	An architecture-based comparison of verification and statistical reliability assessment methods for embedded software systems. , 0, , .		0
97	Replicated Object Management with Periodic Maintenance in Mobile Wireless Systems. Wireless Personal Communications, 2004, 28, 17-33.	1.8	0
98	Update Propagation Algorithms for Supporting Disconnected Write in Mobile Wireless Systems with Data Broadcasting Capability. Wireless Personal Communications, 2005, 34, 227-253.	1.8	0
99	Filtering strategies for TFC selection schemes in 3GPP W-CDMA systems. IEEE Transactions on Wireless Communications, 2006, 5, 1023-1032.	6.1	0
100	Access Protocols in Data Partitioning Based Cloud Storage. , 2013, , .		0
101	Dual-Region Location Management for Mobile Ad Hoc Networks. , 2013, , .		0
102	Corrections to â€œAttack and Defense Strategies for Intrusion Detection in Autonomous Distributed IoT Systemsâ€. IEEE Access, 2020, 8, 207181-207181.	2.6	0
103	Quality assessment for multiple server cooperating systems. , 0, , .		0