Vijay Varadharajan

List of Publications by Year
in descending order

202 papers	4,505 citations	186265 28 h-index	161849 54 g-index
207 all docs	207 docs citations	207 times ranked	3479 citing authors

#	Article	IF	Citations
1	Securing Organization's Data: A Role-Based Authorized Keyword Search Scheme With Efficient Decryption. IEEE Transactions on Cloud Computing, 2023, 11, 25-43.	4.4	7
2	Toward a Trust Aware Network Slice-Based Service Provision in Virtualized Infrastructures. IEEE Transactions on Network and Service Management, 2022, 19, 1065-1082.	4.9	4
3	SDN-Enabled Secure IoT Architecture. IEEE Internet of Things Journal, 2021, 8, 6549-6564.	8.7	44
4	Mutual Information and Feature Importance Gradient Boosting: Automatic byte n€gram feature reranking for Android malware detection. Software - Practice and Experience, 2021, 51, 1518.	3.6	3
5	Software Enabled Security Architecture and Mechanisms for Securing 5G Network Services. , 2021, , .		0
6	Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. IEEE Transactions on Smart Grid, 2021, 12, 3493-3502.	9.0	33
7	Techniques for Securing 5G Network Services from attacks. , 2021, , .		2
8	Techniques for Securing Control Systems from Attacks. , 2021, , .		0
9	Access Control Based Dynamic Path Establishment for Securing Flows from the User Devices with Different Security Clearance. Advances in Intelligent Systems and Computing, 2020, , 1303-1315.	0.6	1
10	On the Design of a Flexible Delegation Model for the Internet of Things Using Blockchain. IEEE Transactions on Industrial Informatics, 2020, 16, 3521-3530.	11.3	33
11	Counteracting Attacks From Malicious End Hosts in Software Defined Networks. IEEE Transactions on Network and Service Management, 2020, 17, 160-174.	4.9	15
12	Byte2vec: Malware Representation and Feature Selection for Android. Computer Journal, 2020, 63, 1125-1138.	2.4	7
13	On the Integration of Blockchain to the Internet of Things for Enabling Access Right Delegation. IEEE Internet of Things Journal, 2020, 7, 2630-2639.	8.7	42
14	Alleviating Heterogeneity in SDN-IoT Networks to Maintain QoS and Enhance Security. IEEE Internet of Things Journal, 2020, 7, 5964-5975.	8.7	32
15	Attack Detection on the Software Defined Networking Switches. , 2020, , .		3
16	Towards a Security Enhanced Virtualised Network Infrastructure for Internet of Medical Things (IoMT). , 2020, , .		18
17	A Survey on Machine Learning Techniques for Cyber Security in the Last Decade. IEEE Access, 2020, 8, 222310-222354.	4.2	187
18	Performance Comparison and Current Challenges of Using Machine Learning Techniques in Cybersecurity. Energies, 2020, 13, 2509.	3.1	137

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19	Towards a Dynamic Policy Enhanced Integrated Security Architecture for SDN Infrastructure. , 2020, , .		2
20	Access control for Internet of Things—enabled assistive technologies: an architecture, challenges and requirements. , 2020, , 1-43.		9
21	Cyber attacks in smart grid – dynamic impacts, analyses and recommendations. IET Cyber-Physical Systems: Theory and Applications, 2020, 5, 321-329.	3.3	11
22	An Accountable Access Control Scheme for Hierarchical Content in Named Data Networks with Revocation. Lecture Notes in Computer Science, 2020, , 569-590.	1.3	6
23	A Detailed Investigation and Analysis of Using Machine Learning Techniques for Intrusion Detection. IEEE Communications Surveys and Tutorials, 2019, 21, 686-728.	39.4	386
24	Policy-based access control for constrained healthcare resources in the context of the Internet of Things. Journal of Network and Computer Applications, 2019, 139, 57-74.	9.1	44
25	Analysis of Policy-Based Security Management System in Software-Defined Networks. IEEE Communications Letters, 2019, 23, 612-615.	4.1	15
26	Towards the Design of a Trust Management Framework for the Internet of Things. , 2019, , .		8
27	A Policy-Based Security Architecture for Software-Defined Networks. IEEE Transactions on Information Forensics and Security, 2019, 14, 897-912.	6.9	73
28	Mitigating attacks in software defined networks. Cluster Computing, 2019, 22, 1143-1157.	5.0	16
29	Secure Monitoring of Patients With Wandering Behavior in Hospital Environments. IEEE Access, 2018, 6, 11523-11533.	4.2	23
30	VMGuard: A VMI-based Security Architecture for Intrusion Detection in Cloud Environment. IEEE Transactions on Cloud Computing, 2018, , 1-1.	4.4	33
31	Securing Services in Networked Cloud Infrastructures. IEEE Transactions on Cloud Computing, 2018, 6, 1149-1163.	4.4	12
32	Modeling Identity for the Internet of Things: Survey, Classification and Trends. , 2018, , .		13
33	Learning Latent Byte-Level Feature Representation for Malware Detection. Lecture Notes in Computer Science, 2018, , 568-578.	1.3	5
34	Malytics: A Malware Detection Scheme. IEEE Access, 2018, 6, 49418-49431.	4.2	30
35	Policy-Based Access Control for Constrained Healthcare Resources. , 2018, , .		13
36	Optimized Identity-Based Encryption from Bilinear Pairing for Lightweight Devices. IEEE Transactions on Dependable and Secure Computing, 2017, 14, 211-220.	5.4	23

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37	On the Design and Implementation of an Integrated Security Architecture for Cloud with Improved Resilience. IEEE Transactions on Cloud Computing, 2017, 5, 375-389.	4.4	14
38	An efficient and provably secure RFID grouping proof protocol. , 2017, , .		11
39	A trust model based energy detection for cognitive radio networks. , 2017, , .		0
40	Mitigating attacks in Software Defined Network (SDN). , 2017, , .		15
41	VAED: VMIâ€assisted evasion detection approach for infrastructure as a service cloud. Concurrency Computation Practice and Experience, 2017, 29, e4133.	2.2	10
42	PSI-NetVisor: Program semantic aware intrusion detection at network and hypervisor layer in cloud. Journal of Intelligent and Fuzzy Systems, 2017, 32, 2909-2921.	1.4	10
43	Securing communication in multiple Autonomous System domains with Software Defined Networking. , 2017, , .		7
44	Privacy-Preserving Mutual Authentication in RFID with Designated Readers. Wireless Personal Communications, 2017, 96, 4819-4845.	2.7	6
45	Fast, Automatic and Scalable Learning to Detect Android Malware. Lecture Notes in Computer Science, 2017, , 848-857.	1.3	5
46	Out-VM monitoring for Malicious Network Packet Detection in cloud. , 2017, , .		16
47	Autoencoder-based feature learning for cyber security applications. , 2017, , .		193
48	Intrusion detection techniques in cloud environment: A survey. Journal of Network and Computer Applications, 2017, 77, 18-47.	9.1	163
49	Towards a Secure Access Control Architecture for the Internet of Things. , 2017, , .		9
50	An Eclat Algorithm Based Energy Detection for Cognitive Radio Networks. , 2017, , .		2
51	On the design of security mechanisms for the Internet of Things. , 2017, , .		12
52	On Design of A Fine-Grained Access Control Architecture for Securing IoT-Enabled Smart Healthcare Systems. , 2017, , .		13
53	SDN-based Dynamic Policy Specification and Enforcement for Provisioning SECaaS in Cloud. Lecture Notes in Computer Science, 2017, , 550-561.	1.3	1
54	Secure Monitoring of the Patients with Wandering Behaviour. , 2017, , .		1

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55	Securing Big Data Environments from Attacks. , 2016, , .		1
56	Integrated Security for Services Hosted in Virtual Environments. , 2016, , .		1
57	On the Design and Implementation of a Security Architecture for End to End Services in Software Defined Networks. , 2016, , .		1
58	On the Design and Implementation of a Security Architecture for Software Defined Networks. , 2016, , .		1
59	Securing Virtual Machines from Anomalies Using Program-Behavior Analysis in Cloud Environment. , 2016, , .		11
60	Efficient approaches for intrusion detection in cloud environment. , 2016, , .		8
61	Rethinking Software Component Security: Software Component Level Integrity and Cross Verification. Computer Journal, 2016, 59, 1735-1748.	2.4	5
62	A Secure Role-Based Cloud Storage System For Encrypted Patient-Centric Health Records. Computer Journal, 2016, 59, 1593-1611.	2.4	12
63	Policy based security architecture for software defined networks. , 2016, , .		12
64	Cascading attacks against smart grid using control command disaggregation and services. , 2016, , .		3
65	A novel malware for subversion of self-protection in anti-virus. Software - Practice and Experience, 2016, 46, 361-379.	3.6	7
66	Practical Approximate k Nearest Neighbor Queries with Location and Query Privacy. IEEE Transactions on Knowledge and Data Engineering, 2016, 28, 1546-1559.	5.7	89
67	Secure Dynamic Software Loading and Execution Using Cross Component Verification. , 2015, , .		3
68	Vulnerabilities of an ECC-based RFID authentication scheme. Security and Communication Networks, 2015, 8, 3262-3270.	1.5	6
69	Securing wireless mobile nodes from distributed denial-of-service attacks. Concurrency Computation Practice and Experience, 2015, 27, 3794-3815.	2.2	1
70	Shared RFID ownership transfer protocols. Computer Standards and Interfaces, 2015, 42, 95-104.	5.4	8
71	Improved detection of primary user emulation attacks in cognitive radio networks. , 2015, , .		20
72	Design and Evaluation of Feature Distributed Malware Attacks against the Internet of Things (IoT). , 2015, , .		17

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73	Biometric analysis for finger vein data. , 2015, , 393-405.		0
74	Enabling Cloud Storage Auditing With Key-Exposure Resistance. IEEE Transactions on Information Forensics and Security, 2015, 10, 1167-1179.	6.9	159
75	Trust Enhanced Security for Tenant Transactions in the Cloud Environment. Computer Journal, 2015, 58, 2388-2403.	2.4	2
76	Generic constructions for role-based encryption. International Journal of Information Security, 2015, 14, 417-430.	3.4	3
77	Botnet detection using software defined networking. , 2015, , .		7
78	Trust Enhanced Cryptographic Role-Based Access Control for Secure Cloud Data Storage. IEEE Transactions on Information Forensics and Security, 2015, 10, 2381-2395.	6.9	78
79	Design, implementation and evaluation of a novel anti-virus parasitic malware. , 2015, , .		3
80	Anonymous Yoking-Group Proofs. , 2015, , .		2
81	A Stochastic Time-Domain Model for Burst Data Aggregation in IEEE 802.15.4 Wireless Sensor Networks. IEEE Transactions on Computers, 2015, 64, 627-639.	3.4	10
82	A Simple and Novel Technique for Counteracting Exploit Kits. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 259-277.	0.3	2
83	Design and Analysis of a Sophisticated Malware Attack Against Smart Grid. Lecture Notes in Computer Science, 2015, , 130-139.	1.3	0
84	Provenance Based Classification Access Policy System Based on Encrypted Search for Cloud Data Storage. Lecture Notes in Computer Science, 2015, , 283-298.	1.3	0
85	Dynamic Workload Balancing for Hadoop MapReduce. , 2014, , .		16
86	Trust Enhanced Cloud Security for Healthcare Services. , 2014, , .		1
87	Design and Analysis of a New Feature-Distributed Malware. , 2014, , .		4
88	Secure monitoring for dementia patients. , 2014, , .		1
89	TrustLite. , 2014, , .		223
90	Design and Analysis of Security Attacks against Critical Smart Grid Infrastructures. , 2014, , .		14

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91	Privacy-Preserving Authorized RFID Authentication Protocols. Lecture Notes in Computer Science, 2014, , 108-122.	1.3	9
92	Survey on securing data storage in the cloud. APSIPA Transactions on Signal and Information Processing, 2014, 3, .	3.3	62
93	Secure administration of cryptographic role-based access control for large-scale cloud storage systems. Journal of Computer and System Sciences, 2014, 80, 1518-1533.	1.2	22
94	Cryptographic Role-Based Access Control for Secure Cloud Data Storage Systems. , 2014, , 313-344.		6
95	Trust enhanced distributed authorisation for web services. Journal of Computer and System Sciences, 2014, 80, 916-934.	1.2	3
96	Security as a Service Model for Cloud Environment. IEEE Transactions on Network and Service Management, 2014, 11, 60-75.	4.9	117
97	Counteracting security attacks in virtual machines in the cloud using property based attestation. Journal of Network and Computer Applications, 2014, 40, 31-45.	9.1	20
98	Antivirus security: naked during updates. Software - Practice and Experience, 2014, 44, 1201-1222.	3.6	18
99	A New Technique for Counteracting Web Browser Exploits. , 2014, , .		0
100	Practical k nearest neighbor queries with location privacy. , 2014, , .		53
101	Techniques for detecting attacks on critical infrastructure. , 2014, , .		1
102	The Silence of the LANs: Efficient Leakage Resilience for IPsec VPNs. IEEE Transactions on Information Forensics and Security, 2014, 9, 221-232.	6.9	10
103	CP-ABE With Constant-Size Keys for Lightweight Devices. IEEE Transactions on Information Forensics and Security, 2014, 9, 763-771.	6.9	133
104	Dynamic delegation framework for role based access control in distributed data management systems. Distributed and Parallel Databases, 2014, 32, 245-269.	1.6	11
105	Feature-Distributed Malware Attack: Risk and Defence. Lecture Notes in Computer Science, 2014, , 457-474.	1.3	7
106	A Trust Management Framework for Secure Cloud Data Storage Using Cryptographic Role-Based Access Control. Communications in Computer and Information Science, 2014, , 226-251.	0.5	0
107	On the Security of Tenant Transactions in the Cloud. , 2013, , .		1
108	Integrating Trust with Cryptographic Role-Based Access Control for Secure Cloud Data Storage. , 2013, , .		14

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109	Securing Mobile Devices from DoS Attacks. , 2013, , .		1
110	A Trust-Aware Framework for Evaluating Security Controls of Service Providers in Cloud Marketplaces. , 2013, , .		25
111	Security Techniques for Counteracting Attacks in Mobile Healthcare Services. Procedia Computer Science, 2013, 21, 374-381.	2.0	9
112	On the Design of a Trust Enhanced Distributed Authorisation Architecture for Service Oriented Architectures. , 2013, , .		0
113	Trust Enhanced Security Architecture for Detecting Insider Threats. , 2013, , .		0
114	Achieving Secure Role-Based Access Control on Encrypted Data in Cloud Storage. IEEE Transactions on Information Forensics and Security, 2013, 8, 1947-1960.	6.9	167
115	A framework for evaluating trust of service providers in cloud marketplaces. , 2013, , .		10
116	Secure RFID Ownership Transfer Protocols. Lecture Notes in Computer Science, 2013, , 189-203.	1.3	1
117	Membership Encryption and Its Applications. Lecture Notes in Computer Science, 2013, , 219-234.	1.3	11
118	Tetherway. , 2012, , .		8
119	Distributed service control technique for detecting security attacks. , 2012, , .		0
120	TREASURE: Trust Enhanced Security for Cloud Environments. , 2012, , .		6
121	A flexible cryptographic approach for secure data storage in the cloud using role-based access control. International Journal of Cloud Computing, 2012, 1, 201.	0.3	4
122	Hashed Random Key Pre-distribution Scheme for Large Heterogeneous Sensor Networks. , 2012, , .		7
123	Trusted Administration of Large-Scale Cryptographic Role-Based Access Control Systems. , 2012, , .		2
124	Intrusion detection techniques for virtual domains. , 2012, , .		2
125	The Silence of the LANs: Efficient Leakage Resilience for IPsec VPNs. Lecture Notes in Computer Science, 2012, , 253-270.	1.3	9
126	A Pre-computable Signature Scheme with Efficient Verification for RFID. Lecture Notes in Computer Science, 2012, , 1-16.	1.3	0

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127	Security and Trust in the Web. Lecture Notes in Computer Science, 2012, , 20-21.	1.3	1
128	Analysis of packet loss for batch traffic arrivals in IEEE 802.15.4-based networks. , 2011, , .		1
129	Techniques for Analysing PDF Malware. , 2011, , .		3
130	On the design of Virtual machine Intrusion detection system. , 2011, , .		0
131	Security Techniques for Beyond 3G Wireless Mobile Networks. , 2011, , .		3
132	Enforcing Role-Based Access Control for Secure Data Storage in the Cloud. Computer Journal, 2011, 54, 1675-1687.	2.4	75
133	TVDSEC: Trusted Virtual Domain Security. , 2011, , .		5
134	Intrusion Detection Techniques for Infrastructure as a Service Cloud. , 2011, , .		38
135	Stochastic Modeling of Hello Flooding in Slotted CSMA/CA Wireless Sensor Networks. IEEE Transactions on Information Forensics and Security, 2011, 6, 1185-1199.	6.9	8
136	Dynamic trust enhanced security model for trusted platform based services. Future Generation Computer Systems, 2011, 27, 564-573.	7.5	39
137	Counteracting DDoS attacks in WLAN. , 2011, , .		1
138	TVLAN: Trusted and Virtualised Local Area Networks. , 2011, , .		0
139	A Hybrid Trust Model for Authorisation Using Trusted Platforms. , 2011, , .		4
140	CertainLogic: A Logic for Modeling Trust and Uncertainty. Lecture Notes in Computer Science, 2011, , 254-261.	1.3	32
141	Reasoning about Dynamic Delegation in Role Based Access Control Systems. Lecture Notes in Computer Science, 2011, , 239-253.	1.3	1
142	Security techniques for zero day attacks. , 2011, , .		1
143	Wireless sensor network key management survey and taxonomy. Journal of Network and Computer Applications, 2010, 33, 63-75.	9.1	273
144	MobileTrust: a trust enhanced security architecture for mobile agent systems. International Journal of Information Security, 2010, 9, 153-178.	3.4	10

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145	A graph theoretic approach to authorization delegation and conflict resolution in decentralised systems. Distributed and Parallel Databases, 2010, 27, 1-29.	1.6	0
146	Internet filtering - Issues and challenges. IEEE Security and Privacy, 2010, 8, 62-65.	1.2	8
147	A trust management architecture for hierarchical wireless sensor networks. , 2010, , .		33
148	A Dynamic Trust Establishment and Management Framework for Wireless Sensor Networks. , 2010, , .		27
149	Analysis of Property Based Attestation in Trusted Platforms. , 2010, , .		2
150	Detecting Security Attacks in Trusted Virtual Domains. , 2010, , .		1
151	Overhearing Gain Analysis in Low-Traffic CDMA Wireless Sensor Networks. , 2010, , .		0
152	Purpose-Based Access Control Policies and Conflicting Analysis. IFIP Advances in Information and Communication Technology, 2010, , 217-228.	0.7	14
153	An Approach to Unified Trust Management Framework. Advances in Information Security, Privacy, and Ethics Book Series, 2010, , 111-134.	0.5	1
154	SECURITY IN MOBILE AD HOC NETWORKS. , 2010, , 671-708.		1
155	DoSTRACK. , 2009, , .		2
156	Evolution and challenges in trust and security in information system infrastructures. , 2009, , .		2
157	A Property-Dependent Agent Transfer Protocol. Lecture Notes in Computer Science, 2009, , 240-263.	1.3	4
158	Trust management towards service-oriented applications. Service Oriented Computing and Applications, 2009, 3, 129-146.	1.6	31
159	Property Based Attestation and Trusted Computing: Analysis and Challenges. , 2009, , .		24
160	SBAC: Service Based Access Control. , 2009, , .		11
161	A Note on Trust-Enhanced Security. IEEE Security and Privacy, 2009, 7, 57-59.	1.2	18
162	Fuzzy Regression Based Trust Prediction in Service-Oriented Applications. Lecture Notes in Computer Science, 2009, , 221-235.	1.3	13

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163	Critical issues in trust management for Mobile Ad-Hoc Networks. , 2009, , .		2
164	Reputation-Based Trust Network Modelling and Simplification in Multiagent-Based E-Commerce Systems. , 2009, , .		2
165	Trust Management in Mobile Ad Hoc Networks. Computer Communications and Networks, 2009, , 473-502.	0.8	7
166	Trust Relationship Modelling in E-commerce-Based Social Network. , 2009, , .		11
167	Reasoning on Weighted Delegatable Authorizations. Lecture Notes in Computer Science, 2009, , 279-286.	1.3	2
168	Secure Interoperation in Multidomain Environments Employing UCON Policies. Lecture Notes in Computer Science, 2009, , 395-402.	1.3	2
169	ALOPA: Authorization Logic for Property Attestation in Trusted Platforms. Lecture Notes in Computer Science, 2009, , 134-148.	1.3	0
170	Evaluating transaction trust and risk levels in peer-to-peer e-commerce environments. Information Systems and E-Business Management, 2008, 6, 25-48.	3.7	30
171	Trust Management for Web Services. , 2008, , .		18
172	Subjective logic based trust model for mobile ad hoc networks. , 2008, , .		26
173	A Novel Approach of Web Search Based on Community Wisdom. , 2008, , .		1
174	On the Applicability of Trusted Computing in Distributed Authorization Using Web Services. Lecture Notes in Computer Science, 2008, , 222-237.	1.3	5
175	Mitigating Flooding Attacks in Mobile Ad-hoc Networks Supporting Anonymous Communications. , 2007, , .		17
176	A New Security Scheme for Integration of Mobile Agents and Web Services. , 2007, , .		4
177	Trust management for trusted computing platforms in web services. , 2007, , .		13
178	Trust Enhanced Secure Mobile Ad-Hoc Network Routing. , 2007, , .		22
179	A Hybrid Trust Model for Enhancing Security in Distributed Systems. , 2007, , .		18
180	Trust Integrated Cooperation Architecture for Mobile Ad-hoc Networks. , 2007, , .		8

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181	DDoS: design, implementation and analysis of automated model. International Journal of Wireless and Mobile Computing, 2007, 2, 72.	0.2	3
182	Role-based Recommendation and Trust Evaluation. , 2007, , .		38
183	The Design of A Rule-based and Event-driven Trust Management Framework. , 2007, , .		12
184	TEAM: Trust Enhanced Security Architecture for Mobile Ad-hoc Networks. Networks, 2008 ICON 2008 16th IEEE International Conference on, 2007, , .	0.0	17
185	A Novel Security Risk Evaluation for Information Systems. , 2007, , .		2
186	Trust and Recommendations in Mobile Ad hoc Networks. , 2007, , .		23
187	Mobile Agent and Web Service Integration Security Architecture. , 2007, , .		5
188	Trust Management and Negotiation for Attestation in Trusted Platforms Using Web Services. , 2007, , .		0
189	Trust Enhanced Security - A New Philosophy for Secure Collaboration of Mobile Agents. , 2006, , .		12
190	A Unified Framework for Trust Management. , 2006, , .		6
191	Trust/sup 2/: developing trust in peer-to-peer environments. , 2005, , .		23
192	Maximizing Utility of Mobile Agent Based E-Commerce Applications with Trust Enhanced Security. Lecture Notes in Computer Science, 2005, , 151-160.	1.3	3
193	Interaction Trust Evaluation in Decentralized Environments. Lecture Notes in Computer Science, 2004, , 144-153.	1.3	31
194	Security for cluster based ad hoc networks. Computer Communications, 2004, 27, 488-501.	5.1	41
195	Modelling Trust Relationships in Distributed Environments. Lecture Notes in Computer Science, 2004, , 40-49.	1.3	10
196	Modelling and Evaluating Trust Relationships in Mobile Agents Based Systems. Lecture Notes in Computer Science, 2003, , 176-190.	1.3	12
197	Resolving Conflicts in Authorization Delegations. Lecture Notes in Computer Science, 2002, , 271-285.	1.3	17
198	m out of n Oblivious Transfer. Lecture Notes in Computer Science, 2002, , 395-405.	1.3	27

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199	Logic-Based Reasoning on Delegatable Authorizations. Lecture Notes in Computer Science, 2002, , 185-193.	1.3	9
200	Security enhanced mobile agents. , 2000, , .		35
201	Verification of network security protocols. Computers and Security, 1989, 8, 693-708.	6.0	20
202	A Unified Taxonomy Framework of Trust. , 0, , 29-50.		2