Luca Caviglione

List of Publications by Year
in descending order

110	1,388	471509 17	414414 32
papers	citations	h-index	g-index

119	119	119	900
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Emerging topics in defending networked systems. Future Generation Computer Systems, 2022, 128, 317-319.	7.5	0
2	IPv6CC: IPv6 covert channels for testing networks against stegomalware and data exfiltration. SoftwareX, 2022, 17, 100975.	2.6	3
3	Security and Privacy Issues of Home Globalization. IEEE Security and Privacy, 2022, 20, 10-11.	1.2	1
4	Information Hiding in the DICOM Message Service and Upper Layer Service with Entropy-Based Detection. Entropy, 2022, 24, 176.	2.2	2
5	Guest editorial: Information security methodology and replication studies. IT - Information Technology, 2022, 64, 1-3.	0.9	1
6	Analysis of Reversible Network Covert Channels. IEEE Access, 2022, 10, 41226-41238.	4.2	0
7	Efficient Detection and Recovery of Malicious PowerShell Scripts Embedded into Digital Images. Security and Communication Networks, 2022, 2022, 1-12.	1.5	0
8	Deep reinforcement learning for multi-objective placement of virtual machines in cloud datacenters. Soft Computing, 2021, 25, 12569-12588.	3.6	33
9	Multiobjective Placement for Secure and Dependable Smart Industrial Environments. IEEE Transactions on Industrial Informatics, 2021, 17, 1298-1306.	11.3	6
10	Tight Arms Race: Overview of Current Malware Threats and Trends in Their Detection. IEEE Access, 2021, 9, 5371-5396.	4.2	59
11	Trends and Challenges in Network Covert Channels Countermeasures. Applied Sciences (Switzerland), 2021, 11, 1641.	2.5	34
12	Cyber reconnaissance techniques. Communications of the ACM, 2021, 64, 86-95.	4.5	26
13	Kernel-level tracing for detecting stegomalware and covert channels in Linux environments. Computer Networks, 2021, 191, 108010.	5.1	24
14	Code Augmentation for Detecting Covert Channels Targeting the IPv6 Flow Label. , 2021, , .		6
15	Risks and Opportunities for Information Hiding in DICOM Standard. , 2021, , .		1
16	CrÃ¨me de la CrÃ¨me: Lessons from Papers in Security Publications. , 2021, , .		0
17	pcapStego: A Tool for Generating Traffic Traces for Experimenting with Network Covert Channels. , 2021, , .		9
18	A Revised Taxonomy of Steganography Embedding Patterns. , 2021, , .		17

#	Article	IF	Citations
19	bccstego: A Framework for Investigating Network Covert Channels. , 2021, , .		11
20	Not all areas are equal: analysis of citations in information security research. Scientometrics, 2020, 122, 267-286.	3.0	5
21	Programmable Data Gathering for Detecting Stegomalware. , 2020, , .		9
22	VoIP network covert channels to enhance privacy and information sharing. Future Generation Computer Systems, 2020, 111, 96-106.	7.5	16
23	Design and performance evaluation of reversible network covert channels. , 2020, , .		4
24	Teaching Cyber Security Through Distance Learning with International Students. , 2020, , 303-324.		0
25	Information Security Methodology, Replication Studies and Information Security Education. Journal of Universal Computer Science, 2020, 26, 762-763.	0.8	0
26	Covert Channels in Transport Layer Security. , 2020, , .		1
27	Stegomalware detection through structural analysis of media files. , 2020, , .		7
28	Investigating Traffic of Smart Speakers and IoT Devices. , 2020, , 273-298.		1
29	Model Predictive Control for Energy-Efficient, Quality-Aware, and Secure Virtual Machine Placement. IEEE Transactions on Automation Science and Engineering, 2019, 16, 420-432.	5.2	26
30	Towards Reversible Storage Network Covert Channels. , 2019, , .		14
31	Recent Advancements in Digital Forensics, Part 2. IEEE Security and Privacy, 2019, 17, 7-8.	1.2	2
32	IPv6 Covert Channels in the Wild. , 2019, , .		18
33	When Time Matters: Predictive Mission Planning in Cyber-Physical Scenarios. IEEE Access, 2019, 7, 11246-11257.	4.2	5
34	Advanced Information Hiding Techniques for Modern Botnets. , 2019, , 165-188.		2
35	Security mechanisms and data access protocols in innovative wireless networks. International Journal of Distributed Sensor Networks, 2018, 14, 155014771880147.	2.2	2
36	Exploiting IP telephony with silence suppression for hidden data transfers. Computers and Security, 2018, 79, 17-32.	6.0	14

#	Article	IF	Citations
37	Emerging and Unconventional: New Attacks and Innovative Detection Techniques. Security and Communication Networks, 2018, 2018, 1-1.	1.5	4
38	Covert Channels in IoT Deployments Through Data Hiding Techniques. , 2018, , .		8
39	IEEE 802.15.4 Air-Ground UAV Communications in Smart Farming Scenarios. IEEE Communications Letters, 2018, 22, 1910-1913.	4.1	61
40	The New Threats of Information Hiding: The Road Ahead. IT Professional, 2018, 20, 31-39.	1.5	71
41	Understanding Information Hiding to Secure Communications and to Prevent Exfiltration of Mobile Data. , 2017, , 185-202.		0
42	A New Data-Hiding Approach for IP Telephony Applications with Silence Suppression. , 2017, , .		6
43	Measuring the Energy Consumption of Cyber Security. , 2017, 55, 58-63.		19
44	Covert Channels in Personal Cloud Storage Services: The Case of Dropbox. IEEE Transactions on Industrial Informatics, 2017, 13, 1921-1931.	11.3	34
45	Using SPDY to improve Web 2.0 over satellite links. International Journal of Satellite Communications and Networking, 2017, 35, 307-321.	1.8	7
46	The Future of Digital Forensics: Challenges and the Road Ahead. IEEE Security and Privacy, 2017, 15, 12-17.	1.2	71
47	Recent Advancements in Digital Forensics. IEEE Security and Privacy, 2017, 15, 10-11.	1.2	3
48	Network Information Hiding and Science 2.0: Can it be a Match?. International Journal of Electronics and Telecommunications, 2017, 63, 217-222.	0.6	4
49	Optimal control of time instants for task replanning in robotic networks. , 2016, , .		4
50	Model predictive control for the placement of virtual machines in cloud computing applications. , 2016, , .		2
51	Seeing the Unseen: Revealing Mobile Malware Hidden Communications via Energy Consumption and Artificial Intelligence. IEEE Transactions on Information Forensics and Security, 2016, 11, 799-810.	6.9	113
52	Satellites, UAVs, Vehicles and Sensors for an Integrated Delay Tolerant Ad Hoc Network. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2016, , 114-122.	0.3	3
53	A deep analysis on future web technologies and protocols over broadband GEO satellite networks. International Journal of Satellite Communications and Networking, 2015, 33, 451-472.	1.8	8
54	A first look at traffic patterns of Siri. Transactions on Emerging Telecommunications Technologies, 2015, 26, 664-669.	3.9	7

#	Article	IF	Citations
55	A survey on energy-aware security mechanisms. Pervasive and Mobile Computing, 2015, 24, 77-90.	3.3	68
56	Predictive Control for Energy-Aware Consolidation in Cloud Datacenters. IEEE Transactions on Control Systems Technology, 2015, , 1-1.	5.2	15
57	Understanding Information Hiding in iOS. Computer, 2015, 48, 62-65.	1.1	4
58	Information Hiding as a Challenge for Malware Detection. IEEE Security and Privacy, 2015, 13, 89-93.	1.2	74
59	Steganography in Modern Smartphones and Mitigation Techniques. IEEE Communications Surveys and Tutorials, 2015, 17, 334-357.	39.4	79
60	Analysis of Human Awareness of Security and Privacy Threats in Smart Environments. Lecture Notes in Computer Science, 2015, , 165-177.	1.3	7
61	A Survey of Green, Energy-Aware Security and Some of Its Recent Developments in Networking and Mobile Computing. , 2014, , .		5
62	A predictive control approach for energy-aware consolidation of virtual machines in cloud computing. , 2014, , .		5
63	A taxonomy-based model of security and privacy in online social networks. International Journal of Computational Science and Engineering, 2014, 9, 325.	0.5	26
64	Hidden and Uncontrolled â€“ On the Emergence of Network Steganographic Threats. , 2014, , 123-133.		16
65	Characterizing SPDY over High Latency Satellite Channels. EAI Endorsed Transactions on Mobile Communications and Applications, 2014, 2, e3.	0.5	0
66	A control theoretic approach for energy-efficient management of Online Social Network services. , 2013, , .		0
67	Analysis and Development of Green-Aware Security Mechanisms for Modern Internet Applications. , 2013, , 589-610.		0
68	Extending HTTP models to Web 2.0 applications: the case of online social networks. International Journal of Computational Science and Engineering, 2013, 8, 210.	0.5	1
69	Performance Evaluation of SPDY over High Latency Satellite Channels. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2013, , 123-134.	0.3	19
70	The energy impact of security mechanisms in modern mobile devices. Network Security, 2012, 2012, 11-14.	0.8	30
71	Enhancement of e-Learning Systems and Methodologies through Advancements in Distributed Computing Technologies. , 2012, , 45-69.		2
72	Architecture of a communication middleware for VANET applications. , 2011, , .		5

#	Article	IF	Citations
73	Extending HTTP Models to Web 2.0 Applications: The Case of Social Networks. , 2011, , .		9
74	A task allocation middleware targeting an RFID-enhanced environment. , 2011, , .		0
75	A framework for the delivery of contents in RFID-driven smart environments. , 2011, , .		5
76	Opportunities, integration and issues of applying new technologies over e-learning platforms. , 2011, , .		10
77	Privacy problems with Web 2.0. Computer Fraud and Security, 2011, 2011, 16-19.	1.6	23
78	Design, optimization and performance evaluation of a content distribution overlay for streaming. Computer Communications, 2011, 34, 1497-1509.	5.1	10
79	What is Green Security?. , 2011, , .		26
80	An Optimized Content Replication and Distribution Framework for Vehicular Networks. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2011, 15, 179-192.	4.2	3
81	An Optimized Architecture for Supporting Data Streaming in Interactive Grids. , 2011, , 43-59.		0
82	Peer-to-peer infrastructures to support the delivery of Learning Objects. , 2010, , .		2
83	A simple neural framework for bandwidth reservation of VoIP communications in cost-effective devices. IEEE Transactions on Consumer Electronics, 2010, 56, 1252-1257.	3.6	5
84	Using P2P overlays to provide QoS in service-oriented wireless networks. IEEE Wireless Communications, 2009, 16, 32-38.	9.0	4
85	Understanding and exploiting the reverse patterns of peer-to-peer file sharing applications. Network Security, 2009, 2009, 8-12.	0.8	1
86	Optimization of a peer-to-peer system for efficient content replication. European Journal of Operational Research, 2009, 196, 423-433.	5.7	4
87	Can satellites face trends? The case of Web 2.0. , 2009, , .		19
88	Enabling cooperation of consumer devices through peer-to-peer overlays. IEEE Transactions on Consumer Electronics, 2009, 55, 414-421.	3.6	8
89	Security in peer-to-peer applications and remote instrumentation over satellite: a scenario including Public Protection and Disaster Relief (PPDR). , 2009, , .		0
90	Traffic volume analysis of a nation-wide eMule community. Computer Communications, 2008, 31, 2485-2495.	5.1	5

#	Article	IF	Citations
91	Optimization of an eMule-like modifier strategy. Computer Communications, 2008, 31, 3876-3882.	5.1	5
92	FIRST: Future Internet — a role for satellite technology. , 2008, , .		32
93	Handling local user mobility and QoS in a controlled ad-hoc environment. , 2007, , .		1
94	Fusion of digital television, broadband Internet and mobile communicationsâ€"Part II: Future service scenarios. International Journal of Satellite Communications and Networking, 2007, 25, 409-440.	1.8	3
95	Design of a peer-to-peer system for optimized content replication. Computer Communications, 2007, 30, 3107-3116.	5.1	10
96	Traffic analysis of an internet online game accessed via a wireless LAN. IEEE Communications Letters, 2006, 10, 698-700.	4.1	8
97	Introducing emergent technologies in tactical and disaster recovery networks. International Journal of Communication Systems, 2006, 19, 1045-1062.	2.5	7
98	An overlay scheme to provide loose QoS for wireless nodes. , 2006, , .		0
99	A P2P Framework For Distributed And Cooperative Laboratories. , 2006, , 309-319.		6
100	Using SIP as P2P Technology. African Journal of Information and Communication Technology, 2005, 1, 38.	0.5	3
101	Peer-to-peer middleware for bandwidth allocation in sensor networks. IEEE Communications Letters, 2005, 9, 285-287.	4.1	15
102	Survey of IPv6 functional interoperability for mobile Internet. , 2005, , .		0
103	P2P in satellite networks: a tutorial on related problems and some possible solutions. , 0, , .		3
104	The “SaterLay”: an Overlay System for Satellite Based Communities. , 0, , .		0
105	A packet snif.ng and synchronization technique to boost P2P satellite networks. , 0, , .		3
106	Supporting Vertical Handover by Using a Pastry Peer-to-Peer Overlay Network. , 0, , .		8
107	Using Kademlia for the Configuration of B3G Radio Access Nodes. , 0, , .		2
108	A Graph-Based Approach to Model Privacy and Security Issues of Online Social Networks. , 0, , 184-205.		2

#	Article	IF	Citations
109	On Social Network Engineering for Secure Web Data and Services. , 0, , 1-4.		0
110	Analysis, Development and Deployment of Statistical Anomaly Detection Techniques for Real E-Mail Traffic. , 0, , 47-71.		0