Maria Cristina Alcaraz Tello

List of Publications by Year
in descending order

76 papers	2,296 citations	218677 26 h-index	233421 45 g-index
80 all docs	80 docs citations	80 times ranked	2017 citing authors

#	Article	IF	Citations
1	Digital Twin: A Comprehensive Survey of Security Threats. IEEE Communications Surveys and Tutorials, 2022, 24, 1475-1503.	39.4	63
2	Classifying resilience approaches for protecting smart grids against cyber threats. International Journal of Information Security, 2022, 21, 1189-1210.	3.4	10
3	Situational Awareness for CPS. , 2021, , 1-3.		0
4	Digital Twins for Intelligent Authorization in the B5G-Enabled Smart Grid. IEEE Wireless Communications, 2021, 28, 48-55.	9.0	35
5	Stakeholder perspectives and requirements on cybersecurity in Europe. Journal of Information Security and Applications, 2021, 61, 102916.	2.5	10
6	Risk Assessment for IoT-Enabled Cyber-Physical Systems. Learning and Analytics in Intelligent Systems, 2021, , 157-173.	0.6	4
7	Guest Editorial: Special Section on Security and Privacy in Industry 4.0. IEEE Transactions on Industrial Informatics, 2020, 16, 6530-6531.	11.3	5
8	Blockchain-assisted access for federated Smart Grid domains: Coupling and features. Journal of Parallel and Distributed Computing, 2020, 144, 124-135.	4.1	29
9	Secure Interoperability in Cyber-Physical Systems. , 2020, , 521-542.		4
10	SealedGRID: A Secure Interconnection of Technologies for Smart Grid Applications. Lecture Notes in Computer Science, 2020, , 169-175.	1.3	0
11	Game Theory-Based Approach for Defense Against APTs. Lecture Notes in Computer Science, 2020, , 297-320.	1.3	5
12	Distributed Detection of APTs: Consensus vs. Clustering. Lecture Notes in Computer Science, 2020, , 174-192.	1.3	3
13	REDUCING INEQUALITIES IN MASTER DEGREE STUDENTS DUE TO SKEWED CURRICULA. , 2020, , .		0
14	Tracking APTs in industrial ecosystems: AÂproof of concept. Journal of Computer Security, 2019, 27, 521-546.	0.8	12
15	Current cyber-defense trends in industrial control systems. Computers and Security, 2019, 87, 101561.	6.0	69
16	Guest Editorial Special Issue on Secure Embedded IoT Devices for Resilient Critical Infrastructures. IEEE Internet of Things Journal, 2019, 6, 7988-7991.	8.7	0
17	Covert Channels-Based Stealth Attacks in Industry 4.0. IEEE Systems Journal, 2019, 13, 3980-3988.	4.6	24
18	Secure Interconnection of IT-OT Networks in Industry 4.0. Advanced Sciences and Technologies for Security Applications, 2019, , 201-217.	0.5	8

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19	Enhancing Security and Dependability of Industrial Networks with Opinion Dynamics. Lecture Notes in Computer Science, 2019, , 263-280.	1.3	6
20	Cloud-Assisted Dynamic Resilience for Cyber-Physical Control Systems. IEEE Wireless Communications, 2018, 25, 76-82.	9.0	42
21	A Resilient Architecture for the Smart Grid. IEEE Transactions on Industrial Informatics, 2018, 14, 3745-3753.	11.3	36
22	Addressing Security in OCPP: Protection Against Man-in-the-Middle Attacks. , 2018, , .		24
23	A Cyber-Physical Systems-Based Checkpoint Model for Structural Controllability. IEEE Systems Journal, 2018, 12, 3543-3554.	4.6	8
24	The Role of Software-Defined Networks for Practical Learning in the Engineering Areas. Proceedings (mdpi), 2018, 2, 1352.	0.2	1
25	Tracking Advanced Persistent Threats in Critical Infrastructures Through Opinion Dynamics. Lecture Notes in Computer Science, 2018, , 555-574.	1.3	10
26	A Survey of IoT-Enabled Cyberattacks: Assessing Attack Paths to Critical Infrastructures and Services. IEEE Communications Surveys and Tutorials, 2018, 20, 3453-3495.	39.4	261
27	Cyber Stealth Attacks in Critical Information Infrastructures. IEEE Systems Journal, 2018, 12, 1778-1792.	4.6	44
28	THE ROLE OF TEST-BEDS IN TEACHING AND LEARNING PROCESSES IN COMPUTER SCIENCE. , 2018, , .		0
29	OCPP Protocol: Security Threats and Challenges. IEEE Transactions on Smart Grid, 2017, 8, 2452-2459.	9.0	89
30	Recommender system for privacy-preserving solutions in smart metering. Pervasive and Mobile Computing, 2017, 41, 205-218.	3.3	31
31	Resilient interconnection in cyber-physical control systems. Computers and Security, 2017, 71, 2-14.	6.0	19
32	Preventing Advanced Persistent Threats in Complex Control Networks. Lecture Notes in Computer Science, 2017, , 402-418.	1.3	15
33	Selecting Privacy Solutions to Prioritise Control in Smart Metering Systems. Lecture Notes in Computer Science, 2017, , 176-188.	1.3	2
34	Resilient industrial control systems based on multiple redundancy. International Journal of Critical Infrastructures, 2017, 13, 278.	0.2	2
35	Cyber-Physical Systems for Wide-Area Situational Awareness. , 2017, , 305-317.		6
36	Analysis of Intrusion Detection Systems in Industrial Ecosystems. , 2017, , .		33

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37	Resilient industrial control systems based on multiple redundancy. International Journal of Critical Infrastructures, 2017, 13, 278.	0.2	0
38	Policy enforcement system for secure interoperable control in distributed Smart Grid systems. Journal of Network and Computer Applications, 2016, 59, 301-314.	9.1	35
39	Safeguarding Structural Controllability in Cyber-Physical Control Systems. Lecture Notes in Computer Science, 2016, , 471-489.	1.3	6
40	Dynamic Restoration in Interconnected RBAC-based Cyber-physical Control Systems. , 2016, , .		3
41	Context-Awareness Using Anomaly-Based Detectors for Smart Grid Domains. Lecture Notes in Computer Science, 2015, , 17-34.	1.3	24
42	A three-stage analysis of IDS for critical infrastructures. Computers and Security, 2015, 55, 235-250.	6.0	7
43	Awareness and reaction strategies for critical infrastructure protection. Computers and Electrical Engineering, 2015, 47, 299-317.	4.8	1
44	Critical infrastructure protection: Requirements and challenges for the 21st century. International Journal of Critical Infrastructure Protection, 2015, 8, 53-66.	4.6	183
45	Multi-round Attacks on Structural Controllability Properties for Non-complete Random Graphs. Lecture Notes in Computer Science, 2015, , 140-151.	1.3	6
46	WASAM: A dynamic wide-area situational awareness model for critical domains in Smart Grids. Future Generation Computer Systems, 2014, 30, 146-154.	7.5	30
47	Diagnosis mechanism for accurate monitoring in critical infrastructure protection. Computer Standards and Interfaces, 2014, 36, 501-512.	5.4	14
48	Recovery of Structural Controllability for Control Systems. Lecture Notes in Computer Science, 2014, , 47-63.	1.3	18
49	Towards Privacy Protection in Smart Grid. Wireless Personal Communications, 2013, 73, 23-50.	2.7	79
50	Wide-Area Situational Awareness for Critical Infrastructure Protection. Computer, 2013, 46, 30-37.	1.1	50
51	Critical Control System Protection in the 21st Century. Computer, 2013, 46, 74-83.	1.1	47
52	Security of industrial sensor network-based remote substations in the context of the Internet of Things. Ad Hoc Networks, 2013, 11, 1091-1104.	5.5	48
53	Smart control of operational threats in control substations. Computers and Security, 2013, 38, 14-27.	6.0	27
54	Structural Controllability of Networks for Non-interactive Adversarial Vertex Removal. Lecture Notes in Computer Science, 2013, , 120-132.	1.3	14

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55	Towards Automatic Critical Infrastructure Protection through Machine Learning. Lecture Notes in Computer Science, 2013, , 197-203.	1.3	10
56	PDR: A Prevention, Detection and Response Mechanism for Anomalies in Energy Control Systems. Lecture Notes in Computer Science, 2013, , 22-33.	1.3	2
57	Selecting key management schemes for WSN applications. Computers and Security, 2012, 31, 956-966.	6.0	36
58	Security Aspects of SCADA and DCS Environments. Lecture Notes in Computer Science, 2012, , 120-149.	1.3	27
59	Analysis of requirements for critical control systems. International Journal of Critical Infrastructure Protection, 2012, 5, 137-145.	4.6	35
60	Smart Grid Privacy: Issues and Solutions. , 2012, , .		34
61	Addressing Situational Awareness in Critical Domains of a Smart Grid. Lecture Notes in Computer Science, 2012, , 58-71.	1.3	2
62	Managing Incidents in Smart Grids à la Cloud. , 2011, , .		24
63	An Early Warning System Based on Reputation for Energy Control Systems. IEEE Transactions on Smart Grid, 2011, 2, 827-834.	9.0	24
64	Secure SCADA framework for the protection of energy control systems. Concurrency Computation Practice and Experience, 2011, 23, 1431-1442.	2.2	20
65	Key management systems for sensor networks in the context of the Internet of Things. Computers and Electrical Engineering, 2011, 37, 147-159.	4.8	243
66	Guest Editorsâ€™ Introduction to the Special Issue on â€œModern trends in applied security: Architectures, implementations and applicationsâ€• Computers and Electrical Engineering, 2011, 37, 127-128.	4.8	0
67	Early Warning System for Cascading Effect Control in Energy Control Systems. Lecture Notes in Computer Science, 2011, , 55-66.	1.3	3
68	SenseKey -- Simplifying the Selection of Key Management Schemes for Sensor Networks. , 2011, , .		6
69	A Security Analysis for Wireless Sensor Mesh Networks in Highly Critical Systems. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2010, 40, 419-428.	2.9	94
70	Analysis of Security Threats, Requirements, Technologies and Standards in Wireless Sensor Networks. Lecture Notes in Computer Science, 2009, , 289-338.	1.3	68
71	The role of Wireless Sensor Networks in the area of Critical Information InfrastructureÂProtection. Information Security Technical Report, 2007, 12, 24-31.	1.3	32
72	A Survey of Cryptographic Primitives and Implementations for Hardware-Constrained Sensor Network Nodes. Mobile Networks and Applications, 2007, 12, 231-244.	3.3	85

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73	Applicability of Public Key Infrastructures in Wireless Sensor Networks. Lecture Notes in Computer Science, 2007, , 313-320.	1.3	15
74	On the Protection and Technologies of Critical Information Infrastructures. Lecture Notes in Computer Science, 2007, , 160-182.	1.3	3
75	Applying Key Infrastructures for Sensor Networks in CIP/CIIP Scenarios. Lecture Notes in Computer Science, 2006, , 166-178.	1.3	11
76	Secure Interoperability in Cyber-Physical Systems. Advances in Information Security, Privacy, and Ethics Book Series, 0, , 137-158.	0.5	8