Luis Javier GarcÃ-a Villalba

List of Publications by Year
in descending order

162 papers	1,913 citations	304368 22 h-index	360668 35 g-index
166 all docs	166 docs citations	166 times ranked	1862 citing authors

#	Article	IF	Citations
1	Natural Language Processing Applied to Forensics Information Extraction With Transformers and Graph Visualization. IEEE Transactions on Computational Social Systems, 2024, , 1-17.	3.2	6
2	A survey of artificial intelligence strategies for automatic detection of sexually explicit videos. Multimedia Tools and Applications, 2022, 81, 3205-3222.	2.6	5
3	Digital Video Manipulation Detection Technique Based on Compression Algorithms. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 2596-2605.	4.7	6
4	Analysis of MP4 Videos in 5G Using SDN. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 2668-2677.	4.7	1
5	Methodological Framework to Collect, Process, Analyze and Visualize Cyber Threat Intelligence Data. Applied Sciences (Switzerland), 2022, 12, 1205.	1.3	10
6	Detecting Cryptojacking Web Threats: An Approach with Autoencoders and Deep Dense Neural Networks. Applied Sciences (Switzerland), 2022, 12, 3234.	1.3	9
7	A Model for the Definition, Prioritization and Optimization of Indicators. Electronics (Switzerland), 2022, 11, 967.	1.8	0
8	A new approach to analyze the independence of statistical tests of randomness. Applied Mathematics and Computation, 2022, 426, 127116.	1.4	3
9	Weaknesses in ENT Battery Design. Applied Sciences (Switzerland), 2022, 12, 4230.	1.3	3
10	Critical Analysis of Hypothesis Tests in Federal Information Processing Standard (140-2). Entropy, 2022, 24, 613.	1.1	3
11	FASSVid: Fast and Accurate Semantic Segmentation for Video Sequences. Entropy, 2022, 24, 942.	1.1	1
12	Copy-move forgery detection technique based on discrete cosine transform blocks features. Neural Computing and Applications, 2021, 33, 4713-4727.	3.2	17
13	Improving Real-Time Hand Gesture Recognition with Semantic Segmentation. Sensors, 2021, 21, 356.	2.1	29
14	A security framework for Ethereum smart contracts. Computer Communications, 2021, 172, 119-129.	3.1	25
15	Compression effects and scene details on the source camera identification of digital videos. Expert Systems With Applications, 2021, 170, 114515.	4.4	6
16	Recommendations on Statistical Randomness Test Batteries for Cryptographic Purposes. ACM Computing Surveys, 2021, 54, 1-34.	16.1	10
17	A Dense Neural Network Approach for Detecting Clone ID Attacks on the RPL Protocol of the IoT. Sensors, 2021, 21, 3173.	2.1	12
18	Adversarial attacks on a lexical sentiment analysis classifier. Computer Communications, 2021, 174, 154-171.	3.1	3

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19	IoT-based security service for the documentary chain of custody. Sustainable Cities and Society, 2021, 71, 102940.	5.1	2
20	Passive Image Forgery Detection Based on the Demosaicing Algorithm and JPEG Compression. IEEE Access, 2020, 8, 11815-11823.	2.6	14
21	An Energy Balanced Flooding Algorithm for a BLE Mesh Network. IEEE Access, 2020, 8, 97946-97958.	2.6	16
22	A Methodology to Evaluate Standards and Platforms within Cyber Threat Intelligence. Future Internet, 2020, 12, 108.	2.4	29
23	Anonymous Real-Time Analytics Monitoring Solution for Decision Making Supported by Sentiment Analysis. Sensors, 2020, 20, 4557.	2.1	12
24	Methodology for Forensics Data Reconstruction on Mobile Devices with Android Operating System Applying In-System Programming and Combination Firmware. Applied Sciences (Switzerland), 2020, 10, 4231.	1.3	8
25	Authentication and integrity of smartphone videos through multimedia container structure analysis. Future Generation Computer Systems, 2020, 108, 15-33.	4.9	11
26	Digital Video Source Identification Based on Containerâ€™s Structure Analysis. IEEE Access, 2020, 8, 36363-36375.	2.6	16
27	Image tampering detection by estimating interpolation patterns. Future Generation Computer Systems, 2020, 107, 229-237.	4.9	8
28	A machine learning forensics technique to detect post-processing in digital videos. Future Generation Computer Systems, 2020, 111, 199-212.	4.9	13
29	An Analysis of Smart Contracts Security Threats Alongside Existing Solutions. Entropy, 2020, 22, 203.	1.1	20
30	Locating similar names through locality sensitive hashing and graph theory. Multimedia Tools and Applications, 2019, 78, 29853-29866.	2.6	0
31	Early Fire Detection on Video Using LBP and Spread Ascending of Smoke. Sustainability, 2019, 11, 3261.	1.6	9
32	Vehicle Counting in Video Sequences: An Incremental Subspace Learning Approach. Sensors, 2019, 19, 2848.	2.1	12
33	Hy-SAIL: Hyper-Scalability, Availability and Integrity Layer for Cloud Storage Systems. IEEE Access, 2019, 7, 90082-90093.	2.6	4
34	Using Twitter Data to Monitor Natural Disaster Social Dynamics: A Recurrent Neural Network Approach with Word Embeddings and Kernel Density Estimation. Sensors, 2019, 19, 1746.	2.1	47
35	EBVBF: Energy Balanced Vector Based Forwarding Protocol. IEEE Access, 2019, 7, 54273-54284.	2.6	10
36	Outdoor Location of Mobile Devices Using Trilateration Algorithms for Emergency Services. IEEE Access, 2019, 7, 52052-52059.	2.6	15

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37	Analysis of the GPS Spoofing Vulnerability in the Drone 3DR Solo. IEEE Access, 2019, 7, 51782-51789.	2.6	60
38	QoS Management and Flexible Traffic Detection Architecture for 5G Mobile Networks. Sensors, 2019, 19, 1335.	2.1	10
39	Set of Usability Heuristics for Quality Assessment of Mobile Applications on Smartphones. IEEE Access, 2019, 7, 116145-116161.	2.6	33
40	Digital Video Source Acquisition Forgery Technique Based on Pattern Sensor Noise Extraction. IEEE Access, 2019, 7, 157363-157373.	2.6	4
41	A traffic analysis attack to compute social network measures. Multimedia Tools and Applications, 2019, 78, 29731-29745.	2.6	3
42	A comparison of learning methods over raw data: forecasting cab services market share in New York City. Multimedia Tools and Applications, 2019, 78, 29783-29804.	2.6	5
43	A novel pattern recognition system for detecting Android malware by analyzing suspicious boot sequences. Knowledge-Based Systems, 2018, 150, 198-217.	4.0	30
44	An algorithm to find relationships between web vulnerabilities. Journal of Supercomputing, 2018, 74, 1061-1089.	2.4	4
45	Analyzing the traffic of penetration testing tools with an IDS. Journal of Supercomputing, 2018, 74, 6454-6469.	2.4	10
46	Enlargement of vulnerable web applications for testing. Journal of Supercomputing, 2018, 74, 6598-6617.	2.4	12
47	Adaptive artificial immune networks for mitigating DoS flooding attacks. Swarm and Evolutionary Computation, 2018, 38, 94-108.	4.5	69
48	Orchestration of use-case driven analytics in 5G scenarios. Journal of Ambient Intelligence and Humanized Computing, 2018, 9, 1097-1117.	3.3	6
49	Distributed One Time Password Infrastructure for Linux Environments. Entropy, 2018, 20, 319.	1.1	1
50	Learning Perfectly Secure Cryptography to Protect Communications with Adversarial Neural Cryptography. Sensors, 2018, 18, 1306.	2.1	42
51	Digital Image Tamper Detection Technique Based on Spectrum Analysis of CFA Artifacts. Sensors, 2018, 18, 2804.	2.1	17
52	Ransomware Automatic Data Acquisition Tool. IEEE Access, 2018, 6, 55043-55052.	2.6	10
53	Digital Images Authentication Technique Based on DWT, DCT and Local Binary Patterns. Sensors, 2018, 18, 3372.	2.1	17
54	New DoS Defense Method Based on Strong Designated Verifier Signatures. Sensors, 2018, 18, 2813.	2.1	12

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55	Detecting Workload-based and Instantiation-based Economic Denial of Sustainability on 5G environments. , 2018, , .		4
56	Software Defined Networks in Wireless Sensor Architectures. Entropy, 2018, 20, 225.	1.1	16
57	Security Architecture and Protocol for Trust Verifications Regarding the Integrity of Files Stored in Cloud Services. Sensors, 2018, 18, 753.	2.1	9
58	Clustering and Flow Conservation Monitoring Tool for Software Defined Networks. Sensors, 2018, 18, 1079.	2.1	3
59	A novel Self-Organizing Network solution towards Crypto-ransomware Mitigation. , 2018, , .		7
60	Future mode of operations for 5G â€“ The SELFNET approach enabled by SDN/NFV. Computer Standards and Interfaces, 2017, 54, 229-246.	3.8	25
61	Alert correlation framework for malware detection by anomaly-based packet payload analysis. Journal of Network and Computer Applications, 2017, 97, 11-22.	5.8	17
62	Advanced Payload Analyzer Preprocessor. Future Generation Computer Systems, 2017, 76, 474-485.	4.9	8
63	A PRNU-based counter-forensic method to manipulate smartphone image source identification techniques. Future Generation Computer Systems, 2017, 76, 418-427.	4.9	25
64	Entropy-Based Economic Denial of Sustainability Detection. Entropy, 2017, 19, 649.	1.1	15
65	Monitoring and Discovery for Self-Organized Network Management in Virtualized and Software Defined Networks. Sensors, 2017, 17, 731.	2.1	14
66	Distributed Data Service for Data Management in Internet of Things Middleware. Sensors, 2017, 17, 977.	2.1	32
67	A Family of ACO Routing Protocols for Mobile Ad Hoc Networks. Sensors, 2017, 17, 1179.	2.1	7
68	Reasoning and Knowledge Acquisition Framework for 5G Network Analytics. Sensors, 2017, 17, 2405.	2.1	11
69	BATCP: Bandwidth-Aggregation Transmission Control Protocol. Symmetry, 2017, 9, 167.	1.1	3
70	Endpoint Security in Networks: An OpenMP Approach for Increasing Malware Detection Speed. Symmetry, 2017, 9, 172.	1.1	2
71	Cybersecurity and Network Forensics: Analysis of Malicious Traffic towards a Honeynet with Deep Packet Inspection. Applied Sciences (Switzerland), 2017, 7, 1082.	1.3	25
72	An Approach to Data Analysis in 5G Networks. Entropy, 2017, 19, 74.	1.1	10

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73	Key Technologies in the Context of Future Networks: Operational and Management Requirements. Future Internet, 2017, 9, 1.	2.4	83
74	Towards Incidence Management in 5G Based on Situational Awareness. Future Internet, 2017, 9, 3.	2.4	17
75	Detection of Electronic Anklet Wearersâ€™ Groupings throughout Telematics Monitoring. ISPRS International Journal of Geo-Information, 2017, 6, 31.	1.4	2
76	An optimisation framework for monitoring of SDN/OpenFlow networks. International Journal of Ad Hoc and Ubiquitous Computing, 2017, 26, 263.	0.3	1
77	Estimation of Anonymous Email Network Characteristics through Statistical Disclosure Attacks. Sensors, 2016, 16, 1832.	2.1	5
78	A Methodological Approach for Assessing Amplified Reflection Distributed Denial of Service on the Internet of Things. Sensors, 2016, 16, 1855.	2.1	16
79	SELFNET Framework self-healing capabilities for 5G mobile networks. Transactions on Emerging Telecommunications Technologies, 2016, 27, 1225-1232.	2.6	20
80	Theia: a tool for the forensic analysis of mobile devices pictures. Computing (Vienna/New York), 2016, 98, 1251-1286.	3.2	0
81	Online masquerade detection resistant to mimicry. Expert Systems With Applications, 2016, 61, 162-180.	4.4	18
82	Advances on Software Defined Sensor, Mobile, and Fixed Networks. International Journal of Distributed Sensor Networks, 2016, 12, 5153718.	1.3	1
83	Disclosing user relationships in email networks. Journal of Supercomputing, 2016, 72, 3787-3800.	2.4	4
84	Image source acquisition identification of mobile devices based on the use of features. Multimedia Tools and Applications, 2016, 75, 7087-7111.	2.6	10
85	Design and Evaluation of a Services Interface for the Internet of Things. Wireless Personal Communications, 2016, 91, 1711-1748.	1.8	13
86	Dynamic IEEE 802.21 information server mesh architecture for heterogeneous networks. International Journal of Ad Hoc and Ubiquitous Computing, 2016, 21, 207.	0.3	0
87	Identification of smartphone brand and model via forensic video analysis. Expert Systems With Applications, 2016, 55, 59-69.	4.4	20
88	Leveraging information security and computational trust for cybersecurity. Journal of Supercomputing, 2016, 72, 3729-3763.	2.4	15
89	On multiple burst-correcting MDS codes. Journal of Computational and Applied Mathematics, 2016, 295, 170-174.	1.1	2
90	Quantitative Criteria for Alert Correlation of Anomalies-based NIDS. IEEE Latin America Transactions, 2015, 13, 3461-3466.	1.2	2

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91	Extracting Association Patterns in Network Communications. Sensors, 2015, 15, 4052-4071.	2.1	3
92	Malware Detection System by Payload Analysis of Network Traffic. IEEE Latin America Transactions, 2015, 13, 850-855.	1.2	15
93	Framework for optimized multimedia routing over software defined networks. Computer Networks, 2015, 92, 369-379.	3.2	12
94	Trends on virtualisation with software defined networking and network function virtualisation. IET Networks, 2015, 4, 255-263.	1.1	27
95	Smartphone image acquisition forensics using sensor fingerprint. IET Computer Vision, 2015, 9, 723-731.	1.3	8
96	Virtual learning communities: unsolved troubles. Multimedia Tools and Applications, 2015, 74, 8505-8519.	2.6	8
97	Solving technological isolation to build virtual learning communities. Multimedia Tools and Applications, 2015, 74, 8521-8539.	2.6	2
98	Web from preprocessor for crawling. Multimedia Tools and Applications, 2015, 74, 8559-8570.	2.6	5
99	Analysis of errors in exif metadata on mobile devices. Multimedia Tools and Applications, 2015, 74, 4735-4763.	2.6	10
100	Smartphone image clustering. Expert Systems With Applications, 2015, 42, 1927-1940.	4.4	33
101	An Optimization Framework for Monitoring of SDN/OpenFlow Networks. International Journal of Ad Hoc and Ubiquitous Computing, 2015, 1, 1.	0.3	1
102	Some new bounds for binary multiple burstâ€correcting codes. Electronics Letters, 2014, 50, 756-758.	0.5	1
103	A Layered Trust Information Security Architecture. Sensors, 2014, 14, 22754-22772.	2.1	6
104	SDN: Evolution and Opportunities in the Development IoT Applications. International Journal of Distributed Sensor Networks, 2014, 10, 735142.	1.3	73
105	GTrust: Group Extension for Trust Models in Distributed Systems. International Journal of Distributed Sensor Networks, 2014, 10, 872842.	1.3	2
106	Source identification for mobile devices, based on wavelet transforms combined with sensor imperfections. Computing (Vienna/New York), 2014, 96, 829-841.	3.2	10
107	E-D2HCP: enhanced distributed dynamic host configuration protocol. Computing (Vienna/New York), 2014, 96, 777-791.	3.2	7
108	Design and evaluation of a decentralised information service architecture for IEEE 802.21 networks. International Journal of Ad Hoc and Ubiquitous Computing, 2014, 15, 275.	0.3	2

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109	Adaptive routing protocol for mobile ad hoc networks. Computing (Vienna/New York), 2014, 96, 817-827.	3.2	4
110	A Zone-Based Media Independent Information Service for IEEE 802.21 Networks. International Journal of Distributed Sensor Networks, 2014, 10, 737218.	1.3	2
111	Advanced Technologies and Communication Solutions for Internet of Things. International Journal of Distributed Sensor Networks, 2014, 10, 896760.	1.3	6
112	Routing Techniques Based on Swarm Intelligence. Advances in Intelligent Systems and Computing, 2014, , 515-519.	0.5	0
113	Evolution and Challenges of Software Defined Networking. , 2013, , .		11
114	Data model extension for security event notification with dynamic risk assessment purpose. Science China Information Sciences, 2013, 56, 1-9.	2.7	3
115	Parallel approach of a bioinspired routing protocol for MANETs. International Journal of Ad Hoc and Ubiquitous Computing, 2013, 12, 141.	0.3	1
116	Hybrid ACO Routing Protocol for Mobile Ad Hoc Networks. International Journal of Distributed Sensor Networks, 2013, 9, 265485.	1.3	9
117	DASC 2013: Message from the Program Chairs. , 2013, , .		0
118	Application of Mobile Technology in Virtual Communities with Information of Conflict-Affected Areas. Studies in Informatics and Control, 2013, 22, .	0.6	2
119	Application of Mobile Technology in Virtual Communities with Information of Conflict-Affected Areas. Studies in Informatics and Control, 2013, 22, 33-42.	0.6	1
120	Multiple Interface Parallel Approach of Bioinspired Routing Protocol for Mobile Ad Hoc Networks. International Journal of Distributed Sensor Networks, 2012, 8, 532572.	1.3	1
121	Security Issues in Mobile Ad Hoc Networks. International Journal of Distributed Sensor Networks, 2012, 8, 818054.	1.3	6
122	Restrictive Disjoint-Link-Based Bioinspired Routing Protocol for Mobile Ad Hoc Networks. International Journal of Distributed Sensor Networks, 2012, 8, 956146.	1.3	1
123	A distributed QoS mechanism for ad hoc network. International Journal of Ad Hoc and Ubiquitous Computing, 2012, 11, 25.	0.3	4
124	Intelligent system for time series classification using support vector machines applied to supply-chain. Expert Systems With Applications, 2012, 39, 10590-10599.	4.4	30
125	Malware Detection System by Payload Analysis of Network Traffic (Poster Abstract). Lecture Notes in Computer Science, 2012, , 397-398.	1.0	5
126	An Efficient Algorithm for Searching Optimal Shortened Cyclic Single-Burst-Correcting Codes. IEEE Communications Letters, 2012, 16, 89-91.	2.5	5

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127	Trie Data Structure to Compare Traffic Payload in a Supervised Anomaly Detection System (Poster) Tj ETQq1 1 0.784314 rgBT /Overlock	1.0	0
128	Technique to Neutralize Link Failures for an ACO-Based Routing Algorithm. Lecture Notes in Computer Science, 2012, , 251-260.	1.0	0
129	Concurrency Optimization for NIDS (Poster Abstract). Lecture Notes in Computer Science, 2012, , 395-396.	1.0	1
130	Advantages of identity certificate segregation in P2PSIP systems. IET Communications, 2011, 5, 879-889.	1.5	6
131	IEEE 802.21 Information Services deployment for heterogeneous mobile environments. IET Communications, 2011, 5, 2721-2729.	1.5	12
132	Efficient Shortened Cyclic Codes Correcting Either Random Errors or Bursts. IEEE Communications Letters, 2011, 15, 749-751.	2.5	1
133	Secure extension to the optimised link state routing protocol. IET Information Security, 2011, 5, 163.	1.1	5
134	Use of Gray codes for optimizing the search of (shortened) cyclic single burst-correcting codes. , 2011, , .		1
135	Self-Configuration and Self-Optimization Process in Heterogeneous Wireless Networks. Sensors, 2011, 11, 425-454.	2.1	5
136	Auto-Configuration Protocols in Mobile Ad Hoc Networks. Sensors, 2011, 11, 3652-3666.	2.1	28
137	Distributed Dynamic Host Configuration Protocol (D2HCP). Sensors, 2011, 11, 4438-4461.	2.1	26
138	Virtualization with Automated Services Catalog for Providing Integrated Information Technology Infrastructure. Lecture Notes in Computer Science, 2011, , 75-91.	1.0	1
139	A Comparison Study between AntOR-Disjoint Node Routing and AntOR-Disjoint Link Routing for Mobile Ad Hoc Networks. Communications in Computer and Information Science, 2011, , 300-304.	0.4	2
140	Comparing AntOR-Disjoint Node Routing Protocol with Its Parallel Extension. Communications in Computer and Information Science, 2011, , 305-309.	0.4	2
141	Grid of Learning Resources in E-learning Communities. Communications in Computer and Information Science, 2011, , 295-299.	0.4	0
142	Improving the Wi-Fi Channel Scanning Using a Decentralized IEEE 802.21 Information Service. Communications in Computer and Information Science, 2011, , 290-294.	0.4	0
143	On the Efficiency of Shortened Cyclic Single-Burst-Correcting Codes. IEEE Transactions on Information Theory, 2010, 56, 3290-3296.	1.5	7
144	Hierarchical Neighbor Discovery Scheme for Handover Optimization. IEEE Communications Letters, 2010, 14, 1020-1022.	2.5	18

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145	Dynamic multi-objective routing algorithm: a multi-objective routing algorithm for the simple hybrid routing protocol on wireless sensor networks. IET Communications, 2010, 4, 1732.	1.5	22
146	Bio-inspired routing protocol for mobile ad hoc networks. IET Communications, 2010, 4, 2187.	1.5	27
147	Routing Protocols in Wireless Sensor Networks. Sensors, 2009, 9, 8399-8421.	2.1	171
148	A proposal of a wireless sensor network routing protocol. Telecommunication Systems, 2008, 38, 61-68.	1.6	13
149	IMIS 2008 - Message from the Workshop Organizers. , 2008, , .		0
150	Enhancing an Integer Challenge-Response Protocol. Lecture Notes in Computer Science, 2008, , 526-540.	1.0	0
151	A proposal of a Wireless Sensor Network Routing Protocol. , 2007, , 410-422.		1
152	Performance of WLAN and MANET networks for new auto-configured mobile IP agents. , 2006, , .		1
153	Proposal of a System for Searching and Indexing Heterogeneous Vulnerabilities Databases. Lecture Notes in Computer Science, 2006, , 819-828.	1.0	0
154	Use of Spectral Techniques in the Design of Symmetrical Cryptosystems. Lecture Notes in Computer Science, 2004, , 859-867.	1.0	0
155	Load Balancing and Survivability for Network Services Based on Intelligent Agents. Lecture Notes in Computer Science, 2004, , 868-881.	1.0	1
156	On MARSâ€™s s-boxes Strength against Linear Cryptanalysis. Lecture Notes in Computer Science, 2003, , 79-83.	1.0	0
157	An efficient algorithm to generate binary sequences for cryptographic purposes. Theoretical Computer Science, 2001, 259, 679-688.	0.5	13
158	A family of keystream generators with large linear complexity. Applied Mathematics Letters, 2001, 14, 545-547.	1.5	5
159	On the linear complexity of the sequences generated by nonlinear filterings. Information Processing Letters, 2000, 76, 67-73.	0.4	11
160	Algorithm for computing minimum distance. Electronics Letters, 1999, 35, 1534.	0.5	3
161	On the general classification of nonlinear filters of m-sequences. Information Processing Letters, 1999, 69, 227-232.	0.4	4
162	Likelihood that a pseudorandom sequence generator has optimal properties. Electronics Letters, 1998, 34, 646.	0.5	4