Carlos Juiz

List of Publications by Year
in descending order

102 papers	1,206 citations	623734 14 h-index	434195 31 g-index
112 all docs	112 docs citations	112 times ranked	872 citing authors

#	Article	IF	Citations
1	Genetic Algorithm for Multi-Objective Optimization of Container Allocation in Cloud Architecture. Journal of Grid Computing, 2018, 16, 113-135.	3.9	138
2	YAFS: A Simulator for IoT Scenarios in Fog Computing. IEEE Access, 2019, 7, 91745-91758.	4.2	136
3	A lightweight decentralized service placement policy for performance optimization in fog computing. Journal of Ambient Intelligence and Humanized Computing, 2019, 10, 2435-2452.	4.9	101
4	Evaluation and efficiency comparison of evolutionary algorithms for service placement optimization in fog architectures. Future Generation Computer Systems, 2019, 97, 131-144.	7.5	82
5	Availability-Aware Service Placement Policy in Fog Computing Based on Graph Partitions. IEEE Internet of Things Journal, 2019, 6, 3641-3651.	8.7	75
6	Resource optimization of container orchestration: a case study in multi-cloud microservices-based applications. Journal of Supercomputing, 2018, 74, 2956-2983.	3.6	56
7	To govern IT, or not to govern IT?. Communications of the ACM, 2015, 58, 58-64.	4.5	45
8	An up-to-date survey in web load balancing. World Wide Web, 2011, 14, 105-131.	4.0	39
9	Multi-Objective Optimization for Virtual Machine Allocation and Replica Placement in Virtualized Hadoop. IEEE Transactions on Parallel and Distributed Systems, 2018, 29, 2568-2581.	5.6	37
10	Implementing Good Governance Principles for the Public Sector in Information Technology Governance Frameworks. Open Journal of Accounting, 2014, 03, 9-27.	0.7	37
11	Migration-Aware Genetic Optimization for MapReduce Scheduling and Replica Placement in Hadoop. Journal of Grid Computing, 2018, 16, 265-284.	3.9	27
12	Virtualization and consolidation: a systematic review of the past 10 years of research on energy and performance. Journal of Supercomputing, 2019, 75, 808-836.	3.6	23
13	Community-based VM placement framework. Journal of Supercomputing, 2015, 71, 4504-4528.	3.6	19
14	Performance-related ontologies and semantic web applications for on-line performance assessment of intelligent systems. Science of Computer Programming, 2006, 61, 27-37.	1.9	17
15	Virtual machine consolidation: a systematic review of its overhead influencing factors. Journal of Supercomputing, 2020, 76, 324-361.	3.6	16
16	Comparing centrality indices for network usage optimization of data placement policies in fog devices. , 2018, , .		14
17	An Up-to-date Survey in Barriers to Open Innovation. Journal of Technology Management and Innovation, 2016, 11, 137-152.	0.7	13
18	Exploring the relationships between dynamic capabilities and IT governance. Transforming Government: People, Process and Policy, 2020, 14, 149-169.	2.1	13

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19	Adaptive admission control algorithm in a QoS-aware Web system. Information Sciences, 2012, 199, 58-77.	6.9	12
20	Analysing human mobility patterns of hiking activities through complex network theory. PLoS ONE, 2017, 12, e0177712.	2.5	12
21	Analysis of burstiness monitoring and detection in an adaptive Web system. Computer Networks, 2009, 53, 668-679.	5.1	11
22	Business/IT Projects Alignment through the Project Portfolio Approval Process as IT Governance Instrument. Procedia, Social and Behavioral Sciences, 2012, 65, 70-75.	0.5	11
23	Performance modelling of pools in soft real-time design architectures. Simulation Modelling Practice and Theory, 2002, 9, 215-240.	0.3	9
24	Community-based complex cloud data center. Physica A: Statistical Mechanics and Its Applications, 2015, 419, 356-372.	2.6	9
25	Balancing Performances in Online VM Placement. Advances in Intelligent Systems and Computing, 2016, , 153-162.	0.6	9
26	Improving the Energy Efficiency in Cloud Computing Data Centres Through Resource Allocation Techniques. , 2017, , 211-236.		9
27	Use of Mobile Devices in the Classroom to Increase Motivation and Participation of Engineering University Students. IEEE Latin America Transactions, 2016, 14, 411-416.	1.6	8
28	The $$CiS^2$$: a new metric for performance and energy trade-off in consolidated servers. Cluster Computing, 2020, 23, 2769-2788.	5.0	8
29	Performance assessment on ambient intelligent applications through ontologies. , 2005, , .		7
30	Why the governance of projects, programs and portfolios (PPP) cannot be separated from the governance of IT standard. , 2017, , .		7
31	Cascading ISO/IEC 38500 based Balanced Score Cards to improve board accountability. Procedia Computer Science, 2018, 138, 417-424.	2.0	7
32	Optimization policy for file replica placement in fog domains. Concurrency Computation Practice and Experience, 2020, 32, e5343.	2.2	7
33	A general method for evaluating the overhead when consolidating servers: performance degradation in virtual machines and containers. Journal of Supercomputing, 2022, 78, 11345-11372.	3.6	7
34	Comparison of predictive techniques in cluster-based network servers with resource allocation. , 0, , .		6
35	An approach to ontology-aided performance engineering through NFR framework. , 2007, , .		6
36	Scalable QoS Content-Aware Load Balancing Algorithm for a Web Switch Based on Classical Policies. , 2008, , .		6

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37	Cloud Resource Management to Improve Energy Efficiency Based on Local Nodes Optimizations. Procedia Computer Science, 2016, 83, 878-885.	2.0	6
38	Governing IT in HEIs: Systematic Mapping Review. Business Systems Research, 2020, 11, 93-109.	1.2	6
39	Service Differentiation and QoS in a Scalable Content-Aware Load Balancing Algorithm. , 2007, , .		5
40	Performance assessment of intelligent distributed systems through software performance ontology engineering (SPOE). Software Quality Journal, 2007, 15, 53-67.	2.2	5
41	OWL-M Extension for Semantic Representations of Ontology Alignments. , 2010, , .		5
42	On the classification and quantification of server consolidation overheads. Journal of Supercomputing, 2021, 77, 23-43.	3.6	5
43	Uncovering Two Decades of Open Innovation Benefits: A Qualitative Meta-Analysis. International Journal of Innovation and Technology Management, 2020, 17, .	1.4	5
44	Modeling an Edge Computing Arithmetic Framework for IoT Environments. Sensors, 2022, 22, 1084.	3.8	5
45	Improved performance model of a real-time software element: the producer-consumer. , 0, , .		4
46	Web Operational Analysis Through Performance-Related Ontologies in OWL for Intelligent Applications. Lecture Notes in Computer Science, 2005, , 612-614.	1.3	4
47	A Statistically Customisable Web Benchmarking Tool. Electronic Notes in Theoretical Computer Science, 2009, 232, 89-99.	0.9	4
48	Improving Web Cache Performance via Adaptive Content Fragmentation Design. , 2011, , .		4
49	An Approximation of Energy Efficiency in Web Systems. Procedia Computer Science, 2013, 18, 2595-2598.	2.0	4
50	Analyzing the Applicability of a Multi-Criteria Decision Method in Fog Computing Placement Problem. , 2019, , .		4
51	Current prospects towards energy-efficient top HPC systems. Computer Science and Information Systems, 2016, 13, 151-171.	1.0	4
52	Modeling of a Generic Edge Computing Application Design. Sensors, 2021, 21, 7276.	3.8	4
53	Arithmetic Framework to Optimize Packet Forwarding among End Devices in Generic Edge Computing Environments. Sensors, 2022, 22, 421.	3.8	4
54	Integrating System Performance Engineering into MASCOT Methodology through Discrete-Event Simulation. Lecture Notes in Computer Science, 2004, , 278-292.	1.3	3

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55	Web Performance and Behavior Ontology. , 2008, , .		3
56	Adaptive admission control algorithm in a QoS-aware Web system. , 2009, , .		3
57	Sustainability in Web server systems. Computers in Industry, 2014, 65, 401-407.	9.9	3
58	Governing technology debt. , 2018, , .		3
59	Modelling a Plain N-Hypercube Topology for Migration in Fog Computing. Lecture Notes in Electrical Engineering, 2021, , 595-608.	0.4	3
60	Performance Modelling of Interaction Protocols in Soft Real-Time Design Architectures. Lecture Notes in Computer Science, 2001, , 300-316.	1.3	3
61	Study on OSPF Algebraic Formal Modelling Using ACP. Elektronika Ir Elektrotechnika, 2018, 24, .	0.8	3
62	Performance improvement of web caching in Web 2.0 via knowledge discovery. Journal of Systems and Software, 2013, 86, 2970-2980.	4.5	2
63	Research line on improving energy efficiency in web servers. , 2013, , .		2
64	Integration of Emergency Web App for accessing the emergency services by mobile phones. , 2013, , .		2
65	Complex Cloud Datacenters. IERI Procedia, 2014, 7, 8-14.	0.3	2
66	How to Improve Board Accountability in ISO/IEC 38500 Based on IT Governance Implementations. International Journal on IT/Business Alignment and Governance, 2019, 10, 22-39.	0.7	2
67	Success and Hindrance Factors of AHA-Oriented Open Service Platforms. Communications in Computer and Information Science, 2021, , 656-668.	0.5	2
68	Veri Merkezi Topolojilerindeki Anahtarlama AygÄ±tlarÄ±nda Enerji Tasarrufuna YÃ¶nelik Aritmetik Ã‡alÄ±ÅŸma. Journal of Polytechnic, 2022, 25, 785-797.	0.7	2
69	Semantic Model for Facial Emotion to Improve the Human Computer Interaction in AmI. Advances in Soft Computing, 0, , 139-148.	0.4	2
70	Delving Into the IT Governance-Management Communication Interface. International Journal of Digital Strategy, Governance, and Business Transformation, 2021, 11, 1-37.	0.8	2
71	Performance analysis of multiclass data transfer elements in soft real-time systems. , 0, , .		1
72	Performance modelling of interaction protocols for component-based system design using object-oriented simulation. , 0, , .		1

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73	Adapting MASCOT methodology to software performance engineering using object-oriented simulation. , 0, , .		1
74	Predictive-adaptive algorithm for a cluster-based network web servers. IEEE Latin America Transactions, 2006, 4, 62-68.	1.6	1
75	Performance-related Ontologies for Ubiquitous Intelligence based on Semantic Web Applications. , 2006, , .		1
76	Handling HTTP flows over a DiffServ framework. , 2007, , .		1
77	Web performance engineering based on ontological languages and semantic web. International Journal of Computer Applications in Technology, 2008, 33, 300.	0.5	1
78	Web Mining Service (WMS), a Public and Free Service for Web Data Mining. , 2009, , .		1
79	From the Origins of Performance Evaluation to New Green ICT Performance Engineering. Lecture Notes in Computer Science, 2011, , 49-60.	1.3	1
80	e-Health should be governed as other assets in healthcare organizations. , 2017, , .		1
81	A Platform for Lightweight Deployment of IoTApplications Based on a Function-as-a-ServiceModel. IEEE Latin America Transactions, 2019, 17, 1155-1162.	1.6	1
82	Semantic Interactions for Context-Aware and Service-Oriented Architecture. Lecture Notes in Computer Science, 2008, , 407-414.	1.3	1
83	Context-Broker Service Architecture for AmI Systems Through Mobile-Agents and Ontologies as Middleware. Lecture Notes in Computer Science, 2006, , 907-916.	1.3	1
84	Accommodating Short and Long Web Traffic Flows over a DiffServ Architecture. Lecture Notes in Computer Science, 2011, , 14-28.	1.3	1
85	Opportunities and Challenges for Green HPC. Advances in Intelligent Systems and Computing, 2015, , 45-54.	0.6	1
86	TOWARDS A SEMANTIC RESEARCH INFORMATION SYSTEM BASED ON RESEARCHERS' CV DOCUMENTS. International Journal for Quality Research, 2019, 13, 131-144.	1.0	1
87	Extending Software Development Governance to meet IT Governance. , 2020, , .		1
88	Model for the Intent to Adopt Green IT in the Context of Organizations. IEEE Access, 2022, 10, 65636-65657.	4.2	1
89	Performance analysis of pools in soft real-time design architectures. , 0, , .		0
90	Evaluating the performance of architectures in MASCOT. Science of Computer Programming, 2005, 57, 45-60.	1.9	0

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91	Promoting web traffic over a DiffServ architecture. , 2007, , .		0
92	Transforming passive users into service providers via semantic enhanced service oriented architecture. , 2011, , .		0
93	Indicators and functionalities of exploitation of academic staff CV using semantic web technologies. , 2014, , .		0
94	Enhanced Service Discovery via Shared Context in a Distributed Architecture. , 2015, , .		0
95	Towards an enhanced VM placement solution for power-aware cloud environments. , 2017, , .		0
96	Algebraic Formal Modelling for HTTP Main Methods using ACP. , 2019, , .		0
97	MQTT Algebraic Formal Modelling Using ACP. , 2020, , .		0
98	Performance Analysis of a Predictive and Adaptive Algorithm in Cluster-Based Network Servers with Resource Allocation. Lecture Notes in Computer Science, 2004, , 615-626.	1.3	0
99	OSPF Algebraic Formal Modelling using ACP - A Formal Description on OSPF Routing Protocol. , 2018, , .		0
100	Algebraic Formal Modelling for EIGRP using ACP - Formal Description Modelling on EIGRP Routing Protocol. , 2018, , .		0
101	A Token Bucket Model with Assured Forwarding for Web Traffic. , 2007, , 298-307.		0
102	Performance and energy consumption tradeoff in server consolidation. BenchCouncil Transactions on Benchmarks, Standards and Evaluations, 2022, 2, 100060.	3.1	0