Francisco Vasques

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161 1,263 16 28 h-index g-index citations papers 1,604 183 4.49 3.4 avg, IF L-index ext. papers ext. citations

#	Paper	IF	Citations
161	Reliability and availability evaluation of Wireless Sensor Networks for industrial applications. <i>Sensors</i> , 2012 , 12, 806-38	3.8	121
160	. IEEE Transactions on Industrial Electronics, 1999, 46, 1241-1251	8.9	115
159	An approach to implement data fusion techniques in wireless sensor networks using genetic machine learning algorithms. <i>Information Fusion</i> , 2014 , 15, 90-101	16.7	48
158	VTP-CSMA: A Virtual Token Passing Approach for Real-Time Communication in IEEE 802.11 Wireless Networks. <i>IEEE Transactions on Industrial Informatics</i> , 2007 , 3, 215-224	11.9	41
157	Cycle time properties of the PROFIBUS timed-token protocol. <i>Computer Communications</i> , 1999 , 22, 120	6 <u>5</u> 1;21 <i>6</i>	5 41
156	Availability issues in wireless visual sensor networks. <i>Sensors</i> , 2014 , 14, 2795-821	3.8	39
155	Reliable real-time communication in CAN networks. <i>IEEE Transactions on Computers</i> , 2003 , 52, 1594-160	7 2.5	34
154	Schedulability analysis of real-time traffic in WorldFIP networks: an integrated approach. <i>IEEE Transactions on Industrial Electronics</i> , 2002 , 49, 1165-1174	8.9	29
153	Estimating the Lifetime of Wireless Sensor Network Nodes through the Use of Embedded Analytical Battery Models. <i>Journal of Sensor and Actuator Networks</i> , 2017 , 6, 8	3.8	25
152	A Temperature-Dependent Battery Model for Wireless Sensor Networks. Sensors, 2017 , 17,	3.8	23
151	Research trends in wireless visual sensor networks when exploiting prioritization. <i>Sensors</i> , 2015 , 15, 17	69 . 84	22
150	Adaptive Monitoring Relevance in Camera Networks for Critical Surveillance Applications. <i>International Journal of Distributed Sensor Networks</i> , 2013 , 9, 836721	1.7	21
149	Real-time communications over hybrid wired/wireless PROFIBUS-based networks		19
148	A new MAC scheme specifically suited for real-time industrial communication based on IEEE 802.11e. <i>Computers and Electrical Engineering</i> , 2013 , 39, 1684-1704	4.3	18
147	Integrating inaccessibility in response time analysis of CAN networks		18
146	Enhancing the availability of wireless visual sensor networks: Selecting redundant nodes in networks with occlusion. <i>Applied Mathematical Modelling</i> , 2017 , 42, 223-243	4.5	16
145	Guaranteeing real-time message deadlines in PROFIBUS networks		16

(2013-2001)

144	Distributed computing for the factory-floor: a real-time approach using WorldFIP networks. <i>Computers in Industry</i> , 2001 , 44, 11-31	11.6	16	
143	Selecting redundant nodes when addressing availability in wireless visual sensor networks 2014 ,		14	
142	Performance evaluation of a compression algorithm for wireless sensor networks in monitoring applications 2008 ,		14	
141	Simulation Analysis of the IEEE 802.11e EDCA Protocol for an Industrially-Relevant Real-Time Communication Scenario 2006 ,		14	
140	NetCoDer: A Retransmission Mechanism for WSNs Based on Cooperative Relays and Network Coding. <i>Sensors</i> , 2016 , 16,	3.8	14	
139	Handling real-time communication in infrastructured IEEE 802.11 wireless networks: The RT-WiFi approach. <i>Journal of Communications and Networks</i> , 2019 , 21, 319-334	4.1	13	
138	Supporting real-time distributed computer-controlled systems with multi-hop P-NET networks. <i>Control Engineering Practice</i> , 1999 , 7, 1015-1025	3.9	13	
137			13	
136	A TDMA-based mechanism for real-time communication in IEEE 802.11e networks 2010 ,		12	
135	A Distributed Multi-Tier Emergency Alerting System Exploiting Sensors-Based Event Detection to Support Smart City Applications. <i>Sensors</i> , 2019 , 20,	3.8	12	
134	Superframe Duration Allocation Schemes to Improve the Throughput of Cluster-Tree Wireless Sensor Networks. <i>Sensors</i> , 2017 , 17,	3.8	11	
133	A review of scalability and topological stability issues in IEEE 802.11s wireless mesh networks deployments. <i>International Journal of Communication Systems</i> , 2016 , 29, 671-693	1.7	11	
132	Assessment of the IEEE 802.11e EDCA Protocol Limitations when Dealing with Real-Time Communication. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2010 , 2010,	3.2	11	
131	Automated Methodology for Dependability Evaluation of Wireless Visual Sensor Networks. <i>Sensors</i> , 2018 , 18,	3.8	11	
130	Editorial Special Section on Communication in Automation. <i>IEEE Transactions on Industrial Informatics</i> , 2006 , 2, 73-77	11.9	10	
129	Real-time communication in unconstrained shared Ethernet networks: the virtual token-passing approa	ich	10	
128	Timing analysis of reliable real-time communication in CAN networks		10	
127	(m,k)-firm pattern spinning to improve the GTS allocation of periodic messages in IEEE 802.15.4 networks. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2013 , 2013,	3.2	9	

126	Challenges in Health Smart Homes 2008,	9
125	A Stochastic Petri Net Model for the Simulation Analysis of the IEEE 802.11e EDCA Communication Protocol 2006 ,	9
124	Simulation models for IEC 61850 communication in electrical substations using GOOSE and SMV time-critical messages 2016 ,	9
123	Outlier detection using k-means clustering and lightweight methods for Wireless Sensor Networks 2016 ,	9
122	An Optimized Relay Selection Technique to Improve the Communication Reliability in Wireless Sensor Networks. <i>Sensors</i> , 2018 , 18,	9
121	Energy-Efficient Packet Relaying in Wireless Image Sensor Networks Exploiting the Sensing Relevancies of Source Nodes and DWT Coding. <i>Journal of Sensor and Actuator Networks</i> , 2013 , 2, 424-448.	8
120	A DHT-based approach for Path Selection and Message Forwarding in IEEE 802.11s industrial Wireless Mesh Networks 2009 ,	8
119	Effect of frame size on energy consumption in wireless image sensor networks 2012,	8
118	Genetic Machine Learning algorithms in the optimization of communication efficiency in Wireless Sensor Networks 2009 ,	8
117	Limitations of the IEEE 802.11e EDCA protocol when supporting real-time communication 2008,	8
116	Replication Management in Reliable Real-Time Systems. <i>Real-Time Systems</i> , 2004 , 26, 261-296 1.3	8
115	A scheme for slot allocation of the FlexRay Static Segment based on response time analysis. **Computer Communications*, 2015 , 63, 65-76 5.1	7
114	Reliability Evaluation of Broadcast Protocols for FlexRay. <i>IEEE Transactions on Vehicular Technology</i> , 2016 , 65, 525-541	7
113	Limitations of the IEEE 802.11 DCF, PCF, EDCA and HCCA to handle real-time traffic 2015 ,	7
112	Optimal sensing redundancy for multiple perspectives of targets in wireless visual sensor networks 2015 ,	7
111	Availability assessment of wireless visual sensor networks for target coverage 2014,	7
110	A routing mechanism based on the sensing relevancies of source nodes for time-critical applications in visual sensor networks 2012 ,	7
109	Enforcing the timing behavior of real-time stations in legacy bus-based industrial Ethernet networks. <i>Computer Standards and Interfaces</i> , 2011 , 33, 249-261	7

(2015-2009)

108	Distributed DBP: A (m,k)-firm based distributed approach for QoS provision in IEEE 802.15.4 networks 2009 ,		7	
107	A coordination layer to handle real-time communication in Wi-Fi networks with uncontrolled traffic sources 2011 ,		7	
106	A TDMA-based mechanism to enforce real-time behavior in WiFi networks 2008,		7	
105	A reference model for the timing analysis of heterogeneous automotive networks. <i>Computer Standards and Interfaces</i> , 2016 , 45, 13-25	3.5	6	
104	Experimental evaluation of multiple retransmission schemes in IEEE 802.15.4 wireless sensor networks 2012 ,		6	
103	Evaluation of the timing properties of two control networks: CAN and PROFIBUS		6	
102	1994,		6	
101	Timing Analysis of hybrid FlexRay, CAN-FD and CAN vehicular networks 2016 ,		6	
100	CT-SIM: A simulation model for wide-scale cluster-tree networks based on the IEEE 802.15.4 and ZigBee standards. <i>International Journal of Distributed Sensor Networks</i> , 2017 , 13, 155014771769847	1.7	5	
99	Modelling Coverage Failures Caused by Mobile Obstacles for the Selection of Faultless Visual Nodes in Wireless Sensor Networks. <i>IEEE Access</i> , 2020 , 8, 41537-41550	3.5	5	
98	Enhancing Redundancy in Wireless Visual Sensor Networks for Target Coverage 2014,		5	
97	QoV: Assessing the monitoring quality in visual sensor networks 2012 ,		5	
96	Guaranteeing real-time message deadlines in the FlexRay static segment using a on-line scheduling approach 2012 ,		5	
95	Communication Response Time in P-NET Networks: Worst-Case Analysis Considering the Actual Token Utilization. <i>Real-Time Systems</i> , 2002 , 22, 229-249	1.3	5	
94	Combining Network Coding and Retransmission Techniques to Improve the Communication Reliability of Wireless Sensor Network. <i>Information (Switzerland)</i> , 2021 , 12, 184	2.6	5	
93	Experimental validation of a battery model for low-power nodes in Wireless Sensor Networks 2016,		5	
92	An Advanced Battery Model for WSN Simulation in Environments With Temperature Variations. <i>IEEE Sensors Journal</i> , 2018 , 18, 8179-8191	4	5	
91	A WSN data retransmission mechanism based on network coding and cooperative relayers 2015 ,		4	

90	Real-Time Analysis of Time-Critical Messages in IEC 61850 Electrical Substation Communication Systems. <i>Energies</i> , 2019 , 12, 2272	3.1	4
89	Relevance-based balanced sink mobility in wireless visual sensor networks 2014,		4
88	Modeling the reliability of a group membership protocol for dual-scheduled time division multiple access networks. <i>Computer Standards and Interfaces</i> , 2012 , 34, 281-291	3.5	4
87	Assessment of the Interference caused by uncontrolled traffic sources upon real-time communication in IEEE 802.11-based mesh networks 2012 ,		4
86	Energy consumption and spatial diversity trade-off in autonomic Wireless Sensor Networks: The (m,k)-Gur Game approach 2013 ,		4
85	Survey of Real-Time Communication in CSMA-Based Networks. <i>Network Protocols and Algorithms</i> , 2010 , 2,	0.3	4
84	A new AODV-based routing protocol adequate for monitoring applications in oil & gas production environments 2010 ,		4
83	DHT-based Cluster Routing Protocol for IEEE802.11s Mesh networks 2009 ,		4
82	A forcing collision resolution approach able to prioritize traffic in CSMA-based networks. <i>Computer Communications</i> , 2010 , 33, 54-64	5.1	4
81	Real-Time Communication in 802.11 Networks: The Virtual Token Passing VTP-CSMA Approach. <i>Local Computer Networks (LCN), Proceedings of the IEEE Conference on</i> , 2006 ,		4
80	A group membership protocol for communication systems with both static and dynamic scheduling 2006 ,		4
79	MULTI-MASTER PROFIBUS DP MODELLING AND WORST CASE ANALYSIS-BASED EVALUATION. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2002 , 35, 343-348		4
78	Non pre-emptive scheduling of messages on SMTV token-passing networks		4
77			4
76	From task scheduling in single processor environments to message scheduling in a PROFIBUS fieldbus network. <i>Lecture Notes in Computer Science</i> , 1999 , 339-352	0.9	4
75	Dynamic Reconfiguration of Cluster-Tree Wireless Sensor Networks to Handle Communication Overloads in Disaster-Related Situations. <i>Sensors</i> , 2020 , 20,	3.8	4
74	GLHOVE: A framework for uniform coverage monitoring using cluster-tree wireless sensor networks 2013 ,		3
73	A framework to support dependability evaluation of WSNs from AADL models 2015 ,		3

(2000-2012)

72	Real-Time Industrial Communication over IEEE802.11e Wireless Local Area Networks. <i>IEEE Latin America Transactions</i> , 2012 , 10, 1844-1849	0.7	3
71	Real-Time Communication for Smart Sensor Networks: A CAN Based Solution. <i>Industrial Informatics,</i> 2009 INDIN 2009 7th IEEE International Conference on, 2007 ,		3
70	Real-time traffic separation in shared Ethernet networks: simulation analysis of the h-BEB collision resolution algorithm		3
69	Analysis of the Worst-Case Real Token Rotation Time in PROFIBUS Networks 1999 , 359-366		3
68	On the Use of Cameras for the Detection of Critical Events in Sensors-Based Emergency Alerting Systems. <i>Journal of Sensor and Actuator Networks</i> , 2020 , 9, 46	3.8	2
67	Alternative Path Communication in Wide-Scale Cluster-Tree Wireless Sensor Networks Using Inactive Periods. <i>Sensors</i> , 2017 , 17,	3.8	2
66	Experimental assessment of LNC-based cooperative communication schemes using commercial off-the-shelf wireless sensor network nodes. <i>International Journal of Communication Systems</i> , 2018 , 31, e3508	1.7	2
65	Relevance-based partial reliability in wireless sensor networks. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2014 , 2014,	3.2	2
64	DCRP: a scalable path selection and forwarding scheme for IEEE 802.11s wireless mesh networks. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2015 , 2015,	3.2	2
63	Evaluating the impact of uncontrolled traffic sources upon real-time communication in IEEE 802.11s mesh networks 2014 ,		2
62	Comparing RT-WiFi and HCCA approaches to handle real-time traffic in open communication environments 2012 ,		2
61	Preliminary results on the assessment of WirelessHART networks in transient fault scenarios 2011 ,		2
60	A 2-tier architecture to support real-time communication in CSMA-based networks 2008,		2
59	A comparison of the communication impact in CAN and TTP/C networks when supporting steer-by-wire systems		2
58	PROBABILISTIC TIMING ANALYSIS OF THE h-BEB COLLISION RESOLUTION ALGORITHM. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005 , 38, 107-114		2
57	A MODEL BASED ON A STOCHASTIC PETRI NET APPROACH FOR DEPENDABILITY EVALUATION OF CONTROLLER AREA NETWORKS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005 , 38, 150-157		2
56	Schedulability analysis of messages in a CAN network applied to an unmanned airship		2
55	Designing Real-Time Systems Based on Mono-Master Profibus-DP Networks. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000 , 33, 19-26		2

54	Pre-run-time schedulability analysis of P-NET fieldbus networks		2
53	Using Ravenscar to support fault-tolerant real-time applications. <i>ACM SIGAda Ada Letters</i> , 2002 , XXII, 47-52	0.4	2
52	Polynomial Approximation of the Battery Discharge Function in IEEE 802.15.4 Nodes: Case Study of MicaZ. <i>Advances in Intelligent Systems and Computing</i> , 2013 , 901-910	0.4	2
51	FoV-Based Quality Assessment and Optimization for Area Coverage in Wireless Visual Sensor Networks. <i>IEEE Access</i> , 2020 , 8, 109568-109580	3.5	2
50	A Comprehensive Dependability Model for QoM-Aware Industrial WSN When Performing Visual Area Coverage in Occluded Scenarios. <i>Sensors</i> , 2020 , 20,	3.8	2
49	AdapTA: Adaptive timeslot allocation scheme for IEEE 802.15.4e LLDN mode 2016 ,		2
48	A Survey of Emergencies Management Systems in Smart Cities. <i>IEEE Access</i> , 2022 , 1-1	3.5	2
47	An opportunistic approach to deal with real-time mesh communication in wireless sensor networks 2014 ,		1
46	Quality of service provision assessment for DDBP approach in IEEE 802.15.4 networks 2014 ,		1
45	Real-time communication in IEEE 802.11s mesh networks: simulation assessment considering the interference of non-real-time traffic sources. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2014 , 2014,	3.2	1
44	Guaranteed Time Slot allocation for periodic messages with (m, k)-firm constraints in IEEE 802.15.4 networks 2012 ,		1
43	Expansion of the available use classes in IEEE 802.15.4 networks for usage in the industrial environment 2012 ,		1
42	Partial energy-efficient hop-by-hop retransmission in wireless sensor networks 2013,		1
41	Implementing the wireless FTT protocol: A feasibility analysis 2010 ,		1
40	The impact of control delay upon the performance of a DC-motor control: Comparison of a centralized vs. a network-based approach 2009 ,		1
39	Reliable communication for DuST networks 2009 ,		1
38	A proposal of real-time publish-subscribe scheme compatible with 802.11e wireless networks 2009 ,		1
37	Technical and economical assessment of the use of wireless gateways in industrial networks 2009 ,		1

36	A semi-reliable energy-efficient retransmission mechanism based on the sensing relevancies of source nodes for wireless image sensor networks 2012 ,		1
35	On the timeliness of multi-hop non-beaconed ZigBee broadcast communications 2008,		1
34	Guest Editorial Special Section on Communication in Automation Part I. <i>IEEE Transactions on Industrial Informatics</i> , 2008 , 4, 2-5	11.9	1
33	An Event-Triggered Smart Sensor Network Architecture. <i>Industrial Informatics, 2009 INDIN 2009 7th IEEE International Conference on</i> , 2007 ,		1
32	Distributed Computer-Controlled Systems: The Dear-COTS Approach. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000 , 33, 113-120		1
31	Engineering Real-Time Applications with WorldFIP: Analysis and Tools. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000 , 33, 245-250		1
30	Replica management in real-time Ada 95 applications 1999 ,		1
29	Automatic Assignment of Emergency Vehicles in Response to Sensors-based Generated Alarms in Smart City Scenarios 2020 ,		1
28	Reliable Communication in Distributed Computer-Controlled Systems. <i>Lecture Notes in Computer Science</i> , 2001 , 136-147	0.9	1
27	Probabilistic Timing Analysis of the h-Beb Collision Resolution Algorithm 2006 , 107-114		1
26	Formal Verification of a Group Membership Protocol Using Model Checking 2007, 471-488		O
25	RT-WiFi Approach to Handle Real-Time Communication: An Experimental Evaluation. <i>Lecture Notes in Computer Science</i> , 2019 , 290-303	0.9	O
24	Multi-criteria Analysis to Select Relay Nodes in the ORST Technique. <i>Lecture Notes in Computer Science</i> , 2019 , 167-182	0.9	О
23	Special issue with selected papers from 2018 Brazilian Symposium on Computer Engineering (SBESC 2018). <i>Design Automation for Embedded Systems</i> , 2020 , 24, 1-2	0.6	
22	Recovery Effect in Low-Power Nodes of Wireless Sensor Networks. <i>Communications in Computer and Information Science</i> , 2017 , 45-62	0.3	
21	Dynamic GTS Scheduling of Periodic Skippable Slots in IEEE 802.15.4 Wireless Sensor Networks. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009 , 42, 110-117		
20	GSC: A REAL-TIME COMMUNICATION SCHEME FOR IEEE 802.11E INDUSTRIAL SYSTEMS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 111-118		
19	IMPLEMENTATION OF AN EVENT-TRIGGERED SMART SENSOR NETWORK ARCHITECTURE BASED ON THE IEEE 802.15.4 STANDARD. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 279-284		

18	A Quality-of-Service (QoS) Based Approach for the Communication Support in Network-Based Control Systems: An On-Going Project. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004 , 37, 641-646	
17	Setting Target Rotation Time in Profibus Based Real-Time Distributed Applications. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1998 , 31, 1-6	
16	Multi-□ <i>ACM SIGAda Ada Letters</i> , 1998 , XVIII, 52-60	0.4
15	Replica management in real-time Ada 95 applications. ACM SIGAda Ada Letters, 1999, XIX, 21-27	0.4
14	To Ada or not to Ada. ACM SIGAda Ada Letters, 1999, XIX, 37-43	0.4
13	Wireless IEEE 802.11-Based Networking Approaches for Industrial Networked Systems286-305	
12	An Architecture for Reliable Distributed Computer-Controlled Systems. <i>IFIP Advances in Information and Communication Technology</i> , 2001 , 43-52	0.5
11	Programming atomic multicast in CAN. ACM SIGAda Ada Letters, 2001, XXI, 79-84	0.4
10	Transparent Environment for Replicated Ravenscar Applications. <i>Lecture Notes in Computer Science</i> , 2002 , 297-308	0.9
9	A Model Based on a Stochastic Petri Net Approach for Dependability Evaluation of Controller Area Networks 2006 , 150-157	
8	A Reliability Evaluation of a Group Membership Protocol. Lecture Notes in Computer Science, 2007, 397	-4009
7	Supporting Real-Time Communication in Large-Scale Wireless Sensor Networks 2015 , 7371-7380	
6	Routing Protocols for IEEE 802.11-Based Mesh Networks 2015 , 6295-6306	
5	Real-Time Communication Support in IEEE 802.11-Based Wireless Mesh Networks 2015 , 7247-7259	
4	Exploiting DHT's Properties to Improve the Scalability of Mesh Networks 2015 , 6177-6185	
3	Um Protocolo Genfico Eficiente de Energia para Aplicafis em Redes de Sensores sem Fio sem Restriß de Tempo de Resposta. <i>Revista De Tecnologia Da Informa</i> ß <i>E Comunica</i> ß, 2015 , 5, 8-15	
2	Using BDI-Agents with Coordination without Communication to Increase Lifetime, Preserving Autonomy and Flexibility in Wireless Sensor Networks. <i>Lecture Notes in Computer Science</i> , 2010 , 243-25	52 ^{0.9}
1	WorldFip. The Electrical Engineering Handbook, 2011 , 1-18	