

Paulo J Portugal

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5452329/publications.pdf>

Version: 2024-02-01

103
papers

1,080
citations

566801

15
h-index

525886

27
g-index

104
all docs

104
docs citations

104
times ranked

862
citing authors

#	ARTICLE	IF	CITATIONS
1	A Survey of Emergencies Management Systems in Smart Cities. IEEE Access, 2022, 10, 61843-61872.	2.6	33
2	A Mathematical Model to Evaluate Visual Sensing Coverage of Emergency Signs on Moving Vehicles. , 2021, , .		1
3	A Distributed Multi-Tier Emergency Alerting System Exploiting Sensors-Based Event Detection to Support Smart City Applications. Sensors, 2020, 20, 170.	2.1	33
4	FoV-Based Quality Assessment and Optimization for Area Coverage in Wireless Visual Sensor Networks. IEEE Access, 2020, 8, 109568-109580.	2.6	5
5	A Comprehensive Dependability Model for QoM-Aware Industrial WSN When Performing Visual Area Coverage in Occluded Scenarios. Sensors, 2020, 20, 6542.	2.1	6
6	On the Use of Cameras for the Detection of Critical Events in Sensors-Based Emergency Alerting Systems. Journal of Sensor and Actuator Networks, 2020, 9, 46.	2.3	7
7	Modelling Coverage Failures Caused by Mobile Obstacles for the Selection of Faultless Visual Nodes in Wireless Sensor Networks. IEEE Access, 2020, 8, 41537-41550.	2.6	11
8	Automatic Assignment of Emergency Vehicles in Response to Sensors-based Generated Alarms in Smart City Scenarios. , 2020, , .		5
9	Handling real-time communication in infrastructured IEEE 802.11 wireless networks: The RT-WiFi approach. Journal of Communications and Networks, 2019, 21, 319-334.	1.8	18
10	Wireless visual sensor networks redeployment based on dependability optimization. , 2019, , .		4
11	A Hybrid Beacon Scheduling Scheme to Allow the Periodic Reconfiguration of Large-scale Cluster-tree WSNs. , 2018, , .		1
12	Automated Methodology for Dependability Evaluation of Wireless Visual Sensor Networks. Sensors, 2018, 18, 2629.	2.1	19
13	On the Computing of Area Coverage by Visual Sensor Networks: Assessing Performance of Approximate and Precise Algorithms. , 2018, , .		10
14	Multiple Mobile Sinks in Event-based Wireless Sensor Networks Exploiting Traffic Conditions in Smart City Applications. , 2018, , .		3
15	An Advanced Battery Model for WSN Simulation in Environments With Temperature Variations. IEEE Sensors Journal, 2018, 18, 8179-8191.	2.4	10
16	CT-SIM: A simulation model for wide-scale cluster-tree networks based on the IEEE 802.15.4 and ZigBee standards. International Journal of Distributed Sensor Networks, 2017, 13, 155014771769847.	1.3	12
17	Recovery Effect in Low-Power Nodes of Wireless Sensor Networks. Communications in Computer and Information Science, 2017, , 45-62.	0.4	0
18	Enhancing the availability of wireless visual sensor networks: Selecting redundant nodes in networks with occlusion. Applied Mathematical Modelling, 2017, 42, 223-243.	2.2	26

#	ARTICLE	IF	CITATIONS
19	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.	2.3	35
20	A Temperature-Dependent Battery Model for Wireless Sensor Networks. <i>Sensors</i> , 2017, 17, 422.	2.1	37
21	Superframe Duration Allocation Schemes to Improve the Throughput of Cluster-Tree Wireless Sensor Networks. <i>Sensors</i> , 2017, 17, 249.	2.1	19
22	Alternative Path Communication in Wide-Scale Cluster-Tree Wireless Sensor Networks Using Inactive Periods. <i>Sensors</i> , 2017, 17, 1049.	2.1	4
23	Experimental validation of a battery model for low-power nodes in Wireless Sensor Networks. , 2016, , .		6
24	An allocation scheme for IEEE 802.15.4-ZigBee cluster-tree networks. , 2016, , .		1
25	AdapTA: Adaptive timeslot allocation scheme for IEEE 802.15.4e LLDN mode. , 2016, , .		2
26	Reliability Evaluation of Broadcast Protocols for FlexRay. <i>IEEE Transactions on Vehicular Technology</i> , 2016, 65, 525-541.	3.9	8
27	Skip game: an autonomic approach for QoS and energy management in IEEE 802.15.4 WSN. , 2015, , .		5
28	A framework to support dependability evaluation of WSNs from AADL models. , 2015, , .		3
29	Limitations of the IEEE 802.11 DCF, PCF, EDCA and HCCA to handle real-time traffic. , 2015, , .		12
30	Optimal sensing redundancy for multiple perspectives of targets in wireless visual sensor networks. , 2015, , .		7
31	Research Trends in Wireless Visual Sensor Networks When Exploiting Prioritization. <i>Sensors</i> , 2015, 15, 1760-1784.	2.1	29
32	A scheme for slot allocation of the FlexRay Static Segment based on response time analysis. <i>Computer Communications</i> , 2015, 63, 65-76.	3.1	9
33	A sleep-scheduling scheme for enhancing QoS and network coverage in IEEE 802.15.4 WSN. , 2015, , .		4
34	Real-Time Communication Support in IEEE 802.11-Based Wireless Mesh Networks. , 2015, , 7247-7259.		0
35	Availability assessment of wireless visual sensor networks for target coverage. , 2014, , .		11
36	Availability Issues in Wireless Visual Sensor Networks. <i>Sensors</i> , 2014, 14, 2795-2821.	2.1	47

#	ARTICLE	IF	CITATIONS
37	Towards a reliability analysis of the design space for the communication subsystem of FT4FTT. , 2014, , .		4
38	Enhancing Redundancy in Wireless Visual Sensor Networks for Target Coverage. , 2014, , .		9
39	Evaluating the impact of uncontrolled traffic sources upon real-time communication in IEEE 802.11s mesh networks. , 2014, , .		3
40	An opportunistic approach to deal with real-time mesh communication in wireless sensor networks. , 2014, , .		1
41	Quality of service provision assessment for DDBP approach in IEEE 802.15.4 networks. , 2014, , .		1
42	Selecting redundant nodes when addressing availability in wireless visual sensor networks. , 2014, , .		20
43	Real-time communication in IEEE 802.11s mesh networks: simulation assessment considering the interference of non-real-time traffic sources. Eurasip Journal on Wireless Communications and Networking, 2014, 2014, .	1.5	3
44	Relevance-based balanced sink mobility in wireless visual sensor networks. , 2014, , .		4
45	An approach to implement data fusion techniques in wireless sensor networks using genetic machine learning algorithms. Information Fusion, 2014, 15, 90-101.	11.7	56
46	Relevance-based partial reliability in wireless sensor networks. Eurasip Journal on Wireless Communications and Networking, 2014, 2014, .	1.5	2
47	GLHOVE: A framework for uniform coverage monitoring using cluster-tree wireless sensor networks. , 2013, , .		7
48	A framework for dependability evaluation of industrial processes. , 2013, , .		0
49	A new MAC scheme specifically suited for real-time industrial communication based on IEEE 802.11e. Computers and Electrical Engineering, 2013, 39, 1684-1704.	3.0	21
50	Delay-aware DWT-based image transmission in wireless visual sensor networks. , 2013, , .		1
51	Adaptive Monitoring Relevance in Camera Networks for Critical Surveillance Applications. International Journal of Distributed Sensor Networks, 2013, 9, 836721.	1.3	25
52	Partial energy-efficient hop-by-hop retransmission in wireless sensor networks. , 2013, , .		1
53	Energy-Efficient Packet Relaying in Wireless Image Sensor Networks Exploiting the Sensing Relevancies of Source Nodes and DWT Coding. Journal of Sensor and Actuator Networks, 2013, 2, 424-448.	2.3	9
54	Polynomial Approximation of the Battery Discharge Function in IEEE 802.15.4 Nodes: Case Study of MicaZ. Advances in Intelligent Systems and Computing, 2013, , 901-910.	0.5	3

#	ARTICLE	IF	CITATIONS
55	Reliability and Availability Evaluation of Wireless Sensor Networks for Industrial Applications. Sensors, 2012, 12, 806-838.	2.1	159
56	Effect of frame size on energy consumption in wireless image sensor networks. , 2012, , .		12
57	Guaranteeing real-time message deadlines in the FlexRay static segment using a on-line scheduling approach. , 2012, , .		8
58	A semi-reliable energy-efficient retransmission mechanism based on the sensing relevancies of source nodes for wireless image sensor networks. , 2012, , .		2
59	Comparing RT-WiFi and HCCA approaches to handle real-time traffic in open communication environments. , 2012, , .		3
60	Expansion of the available use classes in IEEE 802.15.4 networks for usage in the industrial environment. , 2012, , .		1
61	A dynamic communication approach for data fusion in IEEE 802.15.4 Wireless Sensor Networks. , 2012, , .		2
62	Controlling multi-switch networks for prompt reconfiguration. , 2012, , .		10
63	An admission control mechanism to handle real-time traffic in IEEE 802.11 networks in open communication environments. , 2012, , .		0
64	Energy-efficient packet relaying based on the sensing relevancies of source nodes in visual sensor networks. , 2012, , .		1
65	Experimental evaluation of multiple retransmission schemes in IEEE 802.15.4 wireless sensor networks. , 2012, , .		6
66	A routing mechanism based on the sensing relevancies of source nodes for time-critical applications in visual sensor networks. , 2012, , .		9
67	Assessment of the Interference caused by uncontrolled traffic sources upon real-time communication in IEEE 802.11-based mesh networks. , 2012, , .		4
68	Dependability evaluation of WirelessHART best practices. , 2012, , .		5
69	Real-Time Industrial Communication over IEEE802.11e Wireless Local Area Networks. IEEE Latin America Transactions, 2012, 10, 1844-1849.	1.2	3
70	QoV: Assessing the monitoring quality in visual sensor networks. , 2012, , .		6
71	Modeling the reliability of a group membership protocol for dual-scheduled time division multiple access networks. Computer Standards and Interfaces, 2012, 34, 281-291.	3.8	6
72	A Communication Approach for Parallel Data Fusion in IEEE 802.15.4 Wireless Sensor Networks. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
73	Exploring alternatives to scale FTT-SE to large networks. , 2011, , .		4
74	Preliminary results on the assessment of WirelessHART networks in transient fault scenarios. , 2011, , .		2
75	A coordination layer to handle real-time communication in Wi-Fi networks with uncontrolled traffic sources. , 2011, , .		9
76	Engineering and analyzing multi-switch networks with single point of control. , 2011, , .		3
77	Profisafe. The Electrical Engineering Handbook, 2011, , 1-15.	0.2	0
78	A forcing collision resolution approach able to prioritize traffic in CSMA-based networks. Computer Communications, 2010, 33, 54-64.	3.1	5
79	Survey of Real-Time Communication in CSMA-Based Networks. Network Protocols and Algorithms, 2010, 2, .	1.0	6
80	A TDMA-based mechanism for real-time communication in IEEE 802.11e networks. , 2010, , .		17
81	Assessment of the IEEE 802.11e EDCA Protocol Limitations when Dealing with Real-Time Communication. Eurasip Journal on Wireless Communications and Networking, 2010, 2010, .	1.5	14
82	Towards a WirelessHART module for the ns-3 simulator. , 2010, , .		9
83	Link-layer retransmissions in IEEE 802.11g based industrial networks. , 2010, , .		9
84	The impact of control delay upon the performance of a DC-motor control: Comparison of a centralized vs. a network-based approach. , 2009, , .		2
85	A proposal of real-time publish-subscribe scheme compatible with 802.11e wireless networks. , 2009, , .		1
86	Technical and economical assessment of the use of wireless gateways in industrial networks. , 2009, , .		3
87	Genetic Machine Learning algorithms in the optimization of communication efficiency in Wireless Sensor Networks. , 2009, , .		8
88	Limitations of the IEEE 802.11e EDCA protocol when supporting real-time communication. , 2008, , .		14
89	A TDMA-based mechanism to enforce real-time behavior in WiFi networks. , 2008, , .		9
90	A 2-tier architecture to support real-time communication in CSMA-based networks. , 2008, , .		2

#	ARTICLE	IF	CITATIONS
91	A Measurement-Based Modeling Approach for Network-Induced Packet Delay. , 2007, , .		8
92	PERFORMABILITY EVALUATION OF PROFIBUS-DP MULTI-MASTER NETWORKS IN INDUSTRIAL RELEVANT SCENARIOS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 95-102.	0.4	0
93	VTP-CSMA: A Virtual Token Passing Approach for Real-Time Communication in IEEE 802.11 Wireless Networks. IEEE Transactions on Industrial Informatics, 2007, 3, 215-224.	7.2	52
94	A Reliability Evaluation of a Group Membership Protocol. Lecture Notes in Computer Science, 2007, , 397-410.	1.0	0
95	A Stochastic Petri Net Model for the Simulation Analysis of the IEEE 802.11e EDCA Communication Protocol. , 2006, , .		14
96	Simulation Analysis of the IEEE 802.11e EDCA Protocol for an Industrially-Relevant Real-Time Communication Scenario. , 2006, , .		22
97	Real-Time Communication in 802.11 Networks: The Virtual Token Passing VTP-CSMA Approach. Local Computer Networks (LCN), Proceedings of the IEEE Conference on, 2006, , .	0.0	6
98	A Model Based on a Stochastic Petri Net Approach for Dependability Evaluation of Controller Area Networks. , 2006, , 150-157.		1
99	A MODEL BASED ON A STOCHASTIC PETRI NET APPROACH FOR DEPENDABILITY EVALUATION OF CONTROLLER AREA NETWORKS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 150-157.	0.4	3
100	Experimental analysis of outage times for PROFIBUS network. , 2005, , .		2
101	Integration of Manufacturing Applications: Overcoming Heterogeneity to Preserve Investment. IFIP Advances in Information and Communication Technology, 1996, , 191-200.	0.5	0
102	An approach based on stochastic Petri nets for dependability evaluation of profibus-DP networks. , 0, , .		1
103	Emerging Technologies for Industrial Wireless Sensor Networks. , 0, , 343-359.		3