

# Carlos Montez

## List of Publications by Year in descending order

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104  
papers

735  
citations

840776

11  
h-index

713466

21  
g-index

104  
all docs

104  
docs citations

104  
times ranked

682  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental Assessment of IEEE 802.15.4e LLDN Mode Using COTS Wireless Sensor Network Nodes. IEEE Access, 2022, 10, 12829-12837.	4.2	1
2	Lossy Data Compression for IoT Sensors: A Review. Internet of Things (Netherlands), 2022, 19, 100516.	7.7	9
3	LoRaWAN Adaptive Data Rate With Flexible Link Margin. IEEE Internet of Things Journal, 2021, 8, 6053-6061.	8.7	12
4	Combining Network Coding and Retransmission Techniques to Improve the Communication Reliability of Wireless Sensor Network. Information (Switzerland), 2021, 12, 184.	2.9	11
5	Co-Design of Consensus-Based Approach and Reliable Communication Protocol for Vehicular Platoon Control. IEEE Transactions on Vehicular Technology, 2021, 70, 9510-9524.	6.3	10
6	Data-driven Bottom-up Cluster-tree Formation based on the IEEE 802.15.4/ZigBee Protocols. , 2021, , .		0
7	Assessment of Different Algorithms to Solve the Set-Covering Problem in a Relay Selection Technique. , 2020, , .		0
8	Dynamic Reconfiguration of Cluster-Tree Wireless Sensor Networks to Handle Communication Overloads in Disaster-Related Situations. Sensors, 2020, 20, 4707.	3.8	9
9	DMRVR: Dynamic Milk-Run Vehicle Routing Solution Using Fog-Based Vehicular Ad Hoc Networks. Electronics (Switzerland), 2020, 9, 2010.	3.1	5
10	A New Association Scheme for Handling Node Mobility in Cluster-Tree Wireless Sensor Networks. Sensors, 2020, 20, 5694.	3.8	1
11	An analytical model to estimate the state of charge and lifetime for batteries with energy harvesting capabilities. International Journal of Energy Research, 2020, 44, 5243-5258.	4.5	7
12	Cooperative Communication Mechanisms Applied to Wireless Sensor Network. IFIP Advances in Information and Communication Technology, 2020, , 121-128.	0.7	0
13	Real-Time Analysis of Time-Critical Messages in IEC 61850 Electrical Substation Communication Systems. Energies, 2019, 12, 2272.	3.1	16
14	Hierarchical Topology Formation in Large-Scale IEEE 802.15.4 Wireless Sensor Networks. , 2019, , .		2
15	An Efficient Mechanism to Improve Convergecast Traffic in Cluster-tree Wireless Sensor Networks Based on IEEE 802.15.4. , 2019, , .		1
16	Multi-criteria Analysis to Select Relay Nodes in the ORST Technique. Lecture Notes in Computer Science, 2019, , 167-182.	1.3	1
17	Experimental assessment of LNC-based cooperative communication schemes using commercial off-the-shelf wireless sensor network nodes. International Journal of Communication Systems, 2018, 31, e3508.	2.5	4
18	A Hybrid Beacon Scheduling Scheme to Allow the Periodic Reconfiguration of Large-scale Cluster-tree WSNs. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
19	Interference of IEEE 802.11n Networks upon IEEE 802.15.4-Based WBANs: An Experimental Study. , 2018, , .		4
20	An Optimized Relay Selection Technique to Improve the Communication Reliability in Wireless Sensor Networks. Sensors, 2018, 18, 3263.	3.8	13
21	Data-Based Cluster-Tree Formation Scheme for Large-Scale Wireless Sensor Networks. , 2018, , .		6
22	An Advanced Battery Model for WSN Simulation in Environments With Temperature Variations. IEEE Sensors Journal, 2018, 18, 8179-8191.	4.7	10
23	Reliable data dissemination protocol for VANET traffic safety applications. Ad Hoc Networks, 2017, 63, 30-44.	5.5	119
24	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.	2.2	12
25	Recovery Effect in Low-Power Nodes of Wireless Sensor Networks. Communications in Computer and Information Science, 2017, , 45-62.	0.5	0
26	Enhanced association mechanism for IEEE 802.15.4 networks. , 2017, , .		6
27	Smart: Adequate selection of relay nodes to support cooperative communication in WSNs. , 2017, , .		2
28	Estimating the Lifetime of Wireless Sensor Network Nodes through the Use of Embedded Analytical Battery Models. Journal of Sensor and Actuator Networks, 2017, 6, 8.	3.9	35
29	A Temperature-Dependent Battery Model for Wireless Sensor Networks. Sensors, 2017, 17, 422.	3.8	37
30	Superframe Duration Allocation Schemes to Improve the Throughput of Cluster-Tree Wireless Sensor Networks. Sensors, 2017, 17, 249.	3.8	19
31	Alternative Path Communication in Wide-Scale Cluster-Tree Wireless Sensor Networks Using Inactive Periods. Sensors, 2017, 17, 1049.	3.8	4
32	An Architecture for Information Fusion and for Detection, Identification and Treatment of Outliers in Wireless Sensor Networks. Communications in Computer and Information Science, 2017, , 81-100.	0.5	2
33	Design and implementation of a 6LoWPAN gateway for wireless sensor networks integration with the internet of things. International Journal of Embedded Systems, 2016, 8, 380.	0.3	5
34	NetCoDer: A Retransmission Mechanism for WSNs Based on Cooperative Relays and Network Coding. Sensors, 2016, 16, 799.	3.8	19
35	Simulation models for IEC 61850 communication in electrical substations using GOOSE and SMV time-critical messages. , 2016, , .		19
36	Experimental validation of a battery model for low-power nodes in Wireless Sensor Networks. , 2016, , .		6

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37	An allocation scheme for IEEE 802.15.4-ZigBee cluster-tree networks. , 2016, , .		1
38	Outlier detection using k-means clustering and lightweight methods for Wireless Sensor Networks. , 2016, , .		16
39	Experimental assessment of using network coding and cooperative diversity techniques in IEEE 802.15.4 wireless sensor networks. , 2016, , .		3
40	Design and implementation of a 6LoWPAN gateway for wireless sensor networks integration with the internet of things. International Journal of Embedded Systems, 2016, 8, 380.	0.3	3
41	Skip game: an autonomic approach for QoS and energy management in IEEE 802.15.4 WSN. , 2015, , .		5
42	Influence of Mobility Models in Precision Spray Aided by Wireless Sensor Networks. Journal of Physics: Conference Series, 2015, 574, 012153.	0.4	5
43	Limitations of the IEEE 802.11 DCF, PCF, EDCA and HCCA to handle real-time traffic. , 2015, , .		12
44	Organization model for Mobile Wireless Sensor Networks inspired in Artificial Bee Colony. Journal of Physics: Conference Series, 2015, 574, 012142.	0.4	0
45	A WSN data retransmission mechanism based on network coding and cooperative relayers. , 2015, , .		6
46	A sleep-scheduling scheme for enhancing QoS and network coverage in IEEE 802.15.4 WSN. , 2015, , .		4
47	An opportunistic approach to deal with real-time mesh communication in wireless sensor networks. , 2014, , .		1
48	Quality of service provision assessment for DDBP approach in IEEE 802.15.4 networks. , 2014, , .		1
49	An approach to implement data fusion techniques in wireless sensor networks using genetic machine learning algorithms. Information Fusion, 2014, 15, 90-101.	19.1	56
50	GLHOVE: A framework for uniform coverage monitoring using cluster-tree wireless sensor networks. , 2013, , .		7
51	(m,k)-firm pattern spinning to improve the GTS allocation of periodic messages in IEEE 802.15.4 networks. Eurasip Journal on Wireless Communications and Networking, 2013, 2013, .	2.4	11
52	Energy consumption and spatial diversity trade-off in autonomic Wireless Sensor Networks: The (m,k)-Gur Game approach. , 2013, , .		5
53	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.	0.6	3
54	Decentralized Power Aware Approach for Data Fusion in IEEE 802.15.4 Wireless Sensor Networks. , 2012, , .		1

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55	Guaranteed Time Slot allocation for periodic messages with (m, k)-firm constraints in IEEE 802.15.4 networks. , 2012, , .		1
56	Expansion of the available use classes in IEEE 802.15.4 networks for usage in the industrial environment. , 2012, , .		1
57	A dynamic communication approach for data fusion in IEEE 802.15.4 Wireless Sensor Networks. , 2012, , .		2
58	(m,k)-Gur Game: Exploiting Message Discards in Order to Increase the Lifetime and Spatial Diversity in Autonomic Wireless Sensor Networks. , 2012, , .		1
59	Experimental evaluation of multiple retransmission schemes in IEEE 802.15.4 wireless sensor networks. , 2012, , .		6
60	Self-optimization of dense wireless sensor networks based on simulated annealing. , 2012, , .		1
61	A Transmission Power Self-Optimization Technique for Wireless Sensor Networks. ISRN Communications and Networking, 2012, 2012, 1-12.	0.5	7
62	A Communication Approach for Parallel Data Fusion in IEEE 802.15.4 Wireless Sensor Networks. , 2011, , .		0
63	A Predictable Execution Model for Digital TV Java Applications in Conformance with GEM Standard. , 2011, , .		0
64	MASPO: A Mobile Agent System for Sun SPOT. , 2011, , .		14
65	An adaptive approach for the determination of the itinerary of imprecise mobile agents with timing constraints. Web Intelligence and Agent Systems, 2011, 9, 257-268.	0.4	0
66	AS prediction mechanism for distributed threads systems. Journal of Parallel and Distributed Computing, 2011, 71, 1367-1376.	4.1	1
67	A tiny distributed coordination protocol for wireless sensor networks as multi-agent system. , 2010, , .		0
68	Evaluating a Transmission Power Self-Optimization Technique for WSN in EMI Environments. , 2010, , .		4
69	Autonomic approaches for enhancing communication QoS in dense Wireless Sensor Networks with real time requirements. , 2010, , .		11
70	VOA: Variable Offset Algorithm for the optimization of communication efficiency in wireless sensor networks. , 2010, , .		0
71	Towards a transmission power self-optimization in reliable Wireless Sensor Networks. , 2010, , .		6
72	Using BDI-Agents with Coordination without Communication to Increase Lifetime, Preserving Autonomy and Flexibility in Wireless Sensor Networks. Lecture Notes in Computer Science, 2010, , 243-252.	1.3	1

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73	Distributed DBP: A (m,k)-firm based distributed approach for QoS provision in IEEE 802.15.4 networks. , 2009, , .		7
74	On the use of hash tables in real-time applications. , 2009, , .		1
75	Genetic Machine Learning algorithms in the optimization of communication efficiency in Wireless Sensor Networks. , 2009, , .		8
76	Implementing assuring forward per hop behaviour class in web servers with dynamic scheduling and selective discards. International Journal of Communication Networks and Distributed Systems, 2009, 3, 249.	0.4	0
77	Deadline missing predictor based on aperiodic server queue length for distributed systems. Computer Communications, 2008, 31, 4167-4175.	5.1	3
78	Genetic machine learning approach for data fusion applications in dense Wireless Sensor Networks. , 2008, , .		1
79	Deadline Missing Prediction in Systems Based on Distributed Threads. , 2008, , .		0
80	A mechanism for deadline missing prediction in systems based on distributed threads. , 2008, , .		0
81	Determination of the itinerary of imprecise mobile agents using an adaptive approach. , 2008, , .		4
82	Itinerary determination of imprecise mobile agents with firm deadline. Web Intelligence and Agent Systems, 2008, 6, 421-439.	0.4	4
83	Analysis of evaluation metrics for networked control systems. , 2008, , .		0
84	PROBABILISTIC REAL-TIME DATA FUSION IN WIRELESS SENSOR NETWORKS WITH ZIGBEE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 267-272.	0.4	1
85	USING THE POLE PLACEMENT APPROACH IN A CO-DESIGN PROCEDURE FOR A NETWORKED CONTROL SYSTEM. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 154-159.	0.4	0
86	A Middleware for OSCAR and Wireless Sensor Network Environments. , 2007, , .		0
87	Real-Time Dynamic Guarantee in Component-Based Middleware. , 2007, , .		0
88	Prediction of end-to-end deadline missing in distributed threads systems. , 2007, , .		4
89	Soft Real-Time Task Response Time Prediction in Dynamic Embedded Systems. Lecture Notes in Computer Science, 2007, , 273-282.	1.3	5
90	Implementing class of service in web server using adaptive scheduling and admission control. , 2006, , .		1

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91	A New Model for the Itinerary Definition of Real-Time Imprecise Mobile Agents. , 2006, , .		0
92	A Clone-Pair Approach for the Determination of the Itinerary of Imprecise Mobile Agents with Firm Deadlines. , 2006, , .		4
93	Codesign of CAN Networked Control Systems with Remote Controllers using Jitter Margin. Industrial Electronics Society (IECON ), Annual Conference of IEEE, 2006, , .	0.0	1
94	Frad-Hoc: A Framework to Routing AD-Hoc Networks. International Federation for Information Processing, 2006, , 71-82.	0.4	0
95	An adaptive model for programming distributed real-time applications in CORBA. , 0, , .		2
96	An adaptive scheduling approach in real-time CORBA. , 0, , .		11
97	Dealing with overloading in tasks scheduling. , 0, , .		0
98	Infrastructure for virtual enterprises in large-scale open systems. , 0, , .		0
99	Dynamic Determination of the Itinerary of Mobile Agents with Timing Constraints. , 0, , .		9
100	Design Pattern for the Adaptive Scheduling of Real-Time Tasks with Multiple Versions in RTSJ. , 0, , .		2
101	FTWeb: A Fault Tolerant Infrastructure for Web Services. , 0, , .		58
102	Power Optimization for Wireless Sensor Networks. , 0, , .		5
103	Um sistema de reputa��o baseado em Blockchain contra ataques de mensagens falsas em VANETs. , 0, , .		0
104	Projeto Integrado de Controle de Pelot��es baseado em Consenso e um Protocolo de Dissemina��o de Dados Confi��vel. , 0, , .		0