

# Peio Lopez Iturri

## List of Publications by Year in descending order

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122  
papers

1,442  
citations

331259

21  
h-index

395343

33  
g-index

123  
all docs

123  
docs citations

123  
times ranked

1444  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fuzzy Logic-Based Energy Management System Design for Residential Grid-Connected Microgrids. IEEE Transactions on Smart Grid, 2018, 9, 530-543.	6.2	230
2	Implementation and Control of a Residential Electrothermal Microgrid Based on Renewable Energies, a Hybrid Storage System and Demand Side Management. Energies, 2014, 7, 210-237.	1.6	53
3	Design and Experimental Validation of a LoRaWAN Fog Computing Based Architecture for IoT Enabled Smart Campus Applications. Sensors, 2019, 19, 3287.	2.1	51
4	Design, Implementation, and Empirical Validation of an IoT Smart Irrigation System for Fog Computing Applications Based on LoRa and LoRaWAN Sensor Nodes. Sensors, 2020, 20, 6865.	2.1	46
5	Optimized Wireless Channel Characterization in Large Complex Environments by Hybrid Ray Launching-Collaborative Filtering Approach. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 780-783.	2.4	43
6	Design and Implementation of Context Aware Applications With Wireless Sensor Network Support in Urban Train Transportation Environments. IEEE Sensors Journal, 2017, 17, 169-178.	2.4	39
7	Impact of High Power Interference Sources in Planning and Deployment of Wireless Sensor Networks and Devices in the 2.4 GHz Frequency Band in Heterogeneous Environments. Sensors, 2012, 12, 15689-15708.	2.1	36
8	Performance Analysis of IEEE 802.15.4 Compliant Wireless Devices for Heterogeneous Indoor Home Automation Environments. International Journal of Antennas and Propagation, 2012, 2012, 1-14.	0.7	34
9	Aggregator to Electric Vehicle LoRaWAN Based Communication Analysis in Vehicle-to-Grid Systems in Smart Cities. IEEE Access, 2020, 8, 124688-124701.	2.6	33
10	Impact of Body Wearable Sensor Positions on UWB Ranging. IEEE Sensors Journal, 2019, 19, 11449-11457.	2.4	31
11	Evaluation of Electromagnetic Interference and Exposure Assessment from s-Health Solutions Based on Wi-Fi Devices. BioMed Research International, 2015, 2015, 1-9.	0.9	30
12	Towards Sub-Meter Level UWB Indoor Localization Using Body Wearable Sensors. IEEE Access, 2020, 8, 178886-178899.	2.6	26
13	Characterization of Wireless Channel Impact on Wireless Sensor Network Performance in Public Transportation Buses. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 3280-3293.	4.7	24
14	FDTD and Empirical Exploration of Human Body and UWB Radiation Interaction on TOF Ranging. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 1119-1123.	2.4	24
15	Design and Empirical Validation of a Bluetooth 5 Fog Computing Based Industrial CPS Architecture for Intelligent Industry 4.0 Shipyard Workshops. IEEE Access, 2020, 8, 45496-45511.	2.6	23
16	Estimation of Radiofrequency Power Leakage from Microwave Ovens for Dosimetric Assessment at Nonionizing Radiation Exposure Levels. BioMed Research International, 2015, 2015, 1-14.	0.9	22
17	Analysis of estimation of electromagnetic dosimetric values from non-ionizing radiofrequency fields in conventional road vehicle environments. Electromagnetic Biology and Medicine, 2015, 34, 19-28.	0.7	22
18	Spatial Characterization of Personal RF-EMF Exposure in Public Transportation Buses. IEEE Access, 2019, 7, 33038-33054.	2.6	22

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19	From 2G to 5G Spatial Modeling of Personal RF-EMF Exposure Within Urban Public Trams. IEEE Access, 2020, 8, 100930-100947.	2.6	22
20	Analysis of low power wide area network wireless technologies in smart agriculture for large-scale farm monitoring and tractor communications. Measurement: Journal of the International Measurement Confederation, 2022, 187, 110231.	2.5	22
21	Effects of the Body Wearable Sensor Position on the UWB Localization Accuracy. Electronics (Switzerland), 2019, 8, 1351.	1.8	21
22	Design and Empirical Validation of a LoRaWAN IoT Smart Irrigation System. Proceedings (mdpi), 2020, 42, .	0.2	21
23	ZigBee Radio Channel Analysis in a Complex Vehicular Environment [Wireless Corner]. IEEE Antennas and Propagation Magazine, 2014, 56, 232-245.	1.2	19
24	Spatial Characterization of Radio Propagation Channel in Urban Vehicle-to-Infrastructure Environments to Support WSNs Deployment. Sensors, 2017, 17, 1313.	2.1	19
25	Fifth-Generation (5G) mmWave Spatial Channel Characterization for Urban Environmentsâ€™ System Analysis. Sensors, 2020, 20, 5360.	2.1	19
26	Enabling Customizable Services for Multimodal Smart Mobility With City-Platforms. IEEE Access, 2021, 9, 41628-41646.	2.6	17
27	Analysis of Radio Wave Propagation for ISM 2.4 GHz Wireless Sensor Networks in Inhomogeneous Vegetation Environments. Sensors, 2014, 14, 23650-23672.	2.1	16
28	Implementation and Analysis of a Wireless Sensor Network-Based Pet Location Monitoring System for Domestic Scenarios. Sensors, 2016, 16, 1384.	2.1	16
29	An accurate UTD extension to a ray-launching algorithm for the analysis of complex indoor radio environments. Journal of Electromagnetic Waves and Applications, 2016, 30, 43-60.	1.0	16
30	A Radio Channel Model for D2D Communications Blocked by Single Trees in Forest Environments. Sensors, 2019, 19, 4606.	2.1	16
31	Intelligent Control of Wind-Assisted PHEVs Smart Charging Station. Energies, 2019, 12, 909.	1.6	16
32	Long-term degradation rate of crystalline silicon PV modules at commercial PV plants: An 82â€™MWp assessment over 10â€™years. Progress in Photovoltaics: Research and Applications, 2021, 29, 1294-1302.	4.4	16
33	Implementation of Context Aware e-Health Environments Based on Social Sensor Networks. Sensors, 2016, 16, 310.	2.1	15
34	Optimization and Design of Wireless Systems for the Implementation of Context Aware Scenarios in Railway Passenger Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 2838-2850.	4.7	15
35	Influence of meshing adaption in convergence performance of deterministic ray launching estimation in indoor scenarios. Journal of Electromagnetic Waves and Applications, 2017, 31, 544-559.	1.0	15
36	Implementation and Operational Analysis of an Interactive Intensive Care Unit within a Smart Health Context. Sensors, 2018, 18, 389.	2.1	15

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37	Radio Wave Propagation and WSN Deployment in Complex Utility Tunnel Environments. <i>Sensors</i> , 2020, 20, 6710.	2.1	15
38	Building Decentralized Fog Computing-Based Smart Parking Systems: From Deterministic Propagation Modeling to Practical Deployment. <i>IEEE Access</i> , 2020, 8, 117666-117688.	2.6	15
39	Analysis of Wireless Sensor Network Topology and Estimation of Optimal Network Deployment by Deterministic Radio Channel Characterization. <i>Sensors</i> , 2015, 15, 3766-3788.	2.1	14
40	Implementing context aware scenarios to enable smart health in complex urban environments. , 2014, , .		13
41	Design and performance analysis of wireless body area networks in complex indoor e-Health hospital environments for patient remote monitoring. <i>International Journal of Distributed Sensor Networks</i> , 2016, 12, 155014771666806.	1.3	12
42	Influence of the Aging Model of Lithium-Ion Batteries on the Management of PV Self-Consumption Systems. , 2018, , .		12
43	Spatial V2X Traffic Density Channel Characterization for Urban Environments. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2021, 22, 2761-2774.	4.7	11
44	Performance Analysis of ZigBee Wireless Networks for AAL through Hybrid Ray Launching and Collaborative Filtering. <i>Journal of Sensors</i> , 2016, 2016, 1-16.	0.6	10
45	Evaluation of Deployment Challenges of Wireless Sensor Networks at Signalized Intersections. <i>Sensors</i> , 2016, 16, 1140.	2.1	10
46	Deterministic Propagation Modeling for Intelligent Vehicle Communication in Smart Cities. <i>Sensors</i> , 2018, 18, 2133.	2.1	10
47	Deterministic 3D Ray-Launching Millimeter Wave Channel Characterization for Vehicular Communications in Urban Environments. <i>Sensors</i> , 2020, 20, 5284.	2.1	10
48	Implementation of an Interactive Environment With Multilevel Wireless Links for Distributed Botanical Garden in University Campus. <i>IEEE Access</i> , 2020, 8, 132382-132396.	2.6	10
49	SesToCross: Semantic Expert System to Manage Single-Lane Road Crossing. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2017, 18, 1221-1233.	4.7	9
50	Empirical and Modeling Approach for Environmental Indoor RF-EMF Assessment in Complex High-Node Density Scenarios: Public Shopping Malls Case Study. <i>IEEE Access</i> , 2021, 9, 46755-46775.	2.6	9
51	Deterministic and Empirical Approach for Millimeter-Wave Complex Outdoor Smart Parking Solution Deployments. <i>Sensors</i> , 2021, 21, 4112.	2.1	9
52	Implementation and Analysis of ISM 2.4 GHz Wireless Sensor Network Systems in Judo Training Venues. <i>Sensors</i> , 2016, 16, 1247.	2.1	8
53	Implementation of Wireless Sensor Network Architecture for Interactive Shopping Carts to Enable Context-Aware Commercial Areas. <i>IEEE Sensors Journal</i> , 2016, 16, 5416-5425.	2.4	8
54	Challenges in Wireless System Integration as Enablers for Indoor Context Aware Environments. <i>Sensors</i> , 2017, 17, 1616.	2.1	8

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55	Integration of Autonomous Wireless Sensor Networks in Academic School Gardens. <i>Sensors</i> , 2018, 18, 3621.	2.1	8
56	Fuzzy-based energy management of a residential electro-thermal microgrid based on power forecasting. , 2018, , .		8
57	Patient Tracking in a Multi-Building, Tunnel-Connected Hospital Complex. <i>IEEE Sensors Journal</i> , 2020, 20, 14453-14464.	2.4	8
58	Performance Evaluation and Interference Characterization of Wireless Sensor Networks for Complex High-Node Density Scenarios. <i>Sensors</i> , 2019, 19, 3516.	2.1	7
59	Analysis, Design and Practical Validation of an Augmented Reality Teaching System Based on Microsoft HoloLens 2 and Edge Computing. , 0, , .		7
60	Radio Characterization for ISM 2.4 GHz Wireless Sensor Networks for Judo Monitoring Applications. <i>Sensors</i> , 2014, 14, 24004-24028.	2.1	6
61	Dense wireless sensor network design for the implementation of Smart Health environments. , 2015, , .		6
62	Hybrid-based optimization of wireless channel characterization for health services in medical complex environments. , 2015, , .		6
63	Wireless Characterization and Assessment of an UWB-Based System in Industrial Environments. <i>IEEE Access</i> , 2021, 9, 107824-107841.	2.6	6
64	A 3D Ray Launching Time-Frequency Channel Modeling Approach for UWB Ranging Applications. <i>IEEE Access</i> , 2020, 8, 97321-97334.	2.6	5
65	Validation of 3D simulation tool for radio channel modeling at 60ÂGHz: A meeting point for empirical and simulation-based models. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 163, 108038.	2.5	5
66	Basketball Player On-Body Biophysical and Environmental Parameter Monitoring Based on Wireless Sensor Network Integration. <i>IEEE Access</i> , 2021, 9, 27051-27066.	2.6	5
67	Enhanced Wireless Channel Estimation Through Parametric Optimization of Hybrid Ray Launching-Collaborative Filtering Technique. <i>IEEE Access</i> , 2020, 8, 83070-83080.	2.6	5
68	Implementation of Radiating Elements for Radiofrequency Front-Ends by Screen-Printing Techniques for Internet of Things Applications. <i>Sensors</i> , 2019, 19, 3626.	2.1	4
69	Design and Experimental Validation of an Augmented Reality System With Wireless Integration for Context Aware Enhanced Show Experience in Auditoriums. <i>IEEE Access</i> , 2021, 9, 5466-5484.	2.6	4
70	Analysis of Bluetooth-Based Wireless Sensor Networks Performance in Hospital Environments. <i>Proceedings (mdpi)</i> , 2016, 1, .	0.2	3
71	Integration of Wireless Sensor Networks in Intelligent Transportation Systems within Smart City Context. , 2018, , .		3
72	On the requirements of the power converter for second-life lithium-ion batteries. , 2019, , .		3

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73	Millimeter Wave Spatial Channel Characterization for Vehicular Communications. Proceedings (mdpi), 2020, 42, 64.	0.2	3
74	Bi2Bi Communication: Toward Encouragement of Sustainable Smart Mobility. IEEE Access, 2022, 10, 9380-9394.	2.6	3
75	Towards Environmental RF-EMF Assessment of mmWave High-Node Density Complex Heterogeneous Environments. Sensors, 2021, 21, 8419.	2.1	3
76	Estimation of wireless coverage in complex cave environments for speleology applications. , 2014, , .		2
77	Characterization of wireless channel response in in-vehicle environments. , 2014, , .		2
78	Optimal parameter estimation for wireless signal analysis in context-aware scenarios: A brief study. , 2016, , .		2
79	Two-dimensional collaborative filtering approach to wireless channel characterization in medical complex scenarios. , 2016, , .		2
80	Characterization of Radio Propagation Channel in Urban Vehicle to Infrastructure Environments to Support WSNs. Proceedings (mdpi), 2017, 1, 19.	0.2	2
81	Analysis, Design and Empirical Validation of a Smart Campus Based on LoRaWAN. Proceedings (mdpi), 2019, 4, 7.	0.2	2
82	Radio Channel Characterization in Dense Forest Environments for IoT-5G. Proceedings (mdpi), 2018, 4, .	0.2	2
83	IoT Enabled Low Cost Distributed Angle Measurement Fault Detection System for LFR Plants. IEEE Sensors Journal, 2021, 21, 24855-24868.	2.4	2
84	Wireless Channel Assessment of Auditoriums for the Deployment of Augmented Reality Systems for Enhanced Show Experience of Impaired Persons. Proceedings (mdpi), 2019, 42, .	0.2	2
85	Deterministic Radio Channel Characterization for Near-Ground Wireless Sensor Networks Deployment Optimization in Smart Agriculture. , 2020, , .		2
86	Low-Cost Cloud Enabled Wireless Monitoring System for Linear Fresnel Solar Plants. , 2020, 2, .		2
87	Deterministic Wireless Channel Characterization towards the Integration of Communication Capabilities to Enable Context Aware Industrial Internet of Thing Environments. Mobile Networks and Applications, 2023, 28, 4-18.	2.2	2
88	In-Field Energy Performance of Solar PV Module Made of UMG Silicon. IEEE Journal of Photovoltaics, 2022, 12, 1109-1115.	1.5	2
89	Analysis of efficient dense wireless sensor network deployment in Smart City environments. , 2014, , .		1
90	Dosimetric assessment of RadioFrequency power leakage from microwave ovens in complex scenarios. , 2015, , .		1

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91	Radio channel characterization of Vehicle-to-Infrastructure communications at 60GHz. , 2015, , .		1
92	Analysis of Wireless Sensor Network performance in urban infrastructure to vehicle scenarios. , 2016, , .		1
93	Study on the impact of the body shadow effect in wireless channels through dosimetry measurements. , 2017, , .		1
94	Integration of Autonomous Wireless Sensor Networks in Academic School Gardens. Proceedings (mdpi), 2017, 2, .	0.2	1
95	Analysis and Design of IoT-Enabled, Low-Cost Distributed Angle Measurement System. Proceedings (mdpi), 2020, 42, 58.	0.2	1
96	Implementation of a WSN-Based IIoT Monitoring System within the Workshop of a Solar Protection Curtains Company. , 2020, 2, .		1
97	Dosimetric assessment for non-ionizing ISM 2.4 GHz wireless systems in a commercial passenger aircraft. , 2014, , .		0
98	Assessment of electromagnetic dosimetric values from non-ionizing radiofrequency sources in a conventional road vehicle. , 2014, , .		0
99	Radio channel characterization for bluetooth communication systems onboard commercial aircrafts. Microwave and Optical Technology Letters, 2014, 56, 2660-2664.	0.9	0
100	Channel characterization in indoor wireless sensor network deployment in commercial environment. , 2014, , .		0
101	Topological dependence in the performance of deterministic wireless channel estimation. , 2014, , .		0
102	Challenges in the implementation of context-aware scenarios within emergency rooms. , 2015, , .		0
103	Analysis of wireless sensor network performance embedded in motorcycle communication system. , 2015, , .		0
104	Exposure assessment from s-Health solutions based on WLAN/WBAN systems. , 2015, , .		0
105	Analysis of vehicular connectivity in smart health service provision scenarios. , 2016, , .		0
106	Hybrid equivalent source " 3D ray-launching simulation technique for deterministic estimation of radiated emissions of electrical appliances. Journal of Electromagnetic Waves and Applications, 2016, 30, 415-430.	1.0	0
107	Characterisation of radio wave propagation in complex indoor environments with and accurate Ray Launching and UTD method. , 2016, , .		0
108	Assessment of ISM 2.4GHz wireless sensor networks performance in urban infrastructure scenarios. , 2017, , .		0

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109	Characterisation of radio wave propagation in vehicular environments through deterministic methods. , 2017, , .		0
110	Deterministic Propagation Modeling for Intelligent Vehicle Communication in Smart Cities. Proceedings (mdpi), 2017, 2, .	0.2	0
111	Efficient Wireless Channel Characterization in Medicalised Vehicles for Smart Health. , 2018, , .		0
112	Wireless System Integration to Enable Smart Cities and Smart Regions. Proceedings (mdpi), 2018, 2, 109.	0.2	0
113	RF Channel Propagation Modeling for Wireless Sensor Networks in Intelligent Transportation Systems. , 2019, , .		0
114	Performance Evaluation and Interference Characterization of Wireless Sensor Networks for Complex High-Node Density Scenarios. Proceedings (mdpi), 2018, 4, .	0.2	0
115	Context Aware Intensive Care Unit Wireless System Analysis. , 2019, , .		0
116	Wireless Channel Characterization and System Analysis of Complex Utility Tunnel Environments. Proceedings (mdpi), 2020, 42, 53.	0.2	0
117	Integration of Wireless Communication Capabilities to Enable Context Aware Industrial Internet of Thing Environments. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 162-170.	0.2	0
118	Wireless Performance in Dense-Transceiver Scenarios to Enable Context-Aware Scenarios. , 2018, , 329-350.		0
119	Multi-Level Internet of Things Communication Strategy for Microgrid Smart Network. Proceedings (mdpi), 2019, 42, .	0.2	0
120	INTERACTIVE PROMOTION OF STEM UNIVERSITY DEGREES AMONG HIGH SCHOOL STUDENTS. , 2020, , .		0
121	Intra-train Wagon Wireless Channel Connectivity Analysis of Ultra Dense Node Deployments. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 269-279.	0.2	0
122	Deterministic-Based 5G mmWave Propagation Characterization in Urban Environments. , 2021, , .		0