Manuel Garcia Sanchez

List of Publications by Year
in descending order

158 papers	1,273 citations	567281 15 h-index	477307 29 g-index
160 all docs	160 docs citations	160 times ranked	1104 citing authors

#	Article	IF	Citations
1	Impulsive noise measurements and characterization in a UHF digital TV channel. IEEE Transactions on Electromagnetic Compatibility, 1999, 41, 124-136.	2.2	100
2	RMS delay and coherence bandwidth measurements in indoor radio channels in the UHF band. IEEE Transactions on Vehicular Technology, 2001, 50, 515-525.	6.3	98
3	Measurement and Analysis of Propagation Mechanisms at 40 GHz: Viability of Site Shielding Forced by Obstacles. IEEE Transactions on Vehicular Technology, 2008, 57, 3369-3380.	6.3	81
4	Millimeter wave radio channel characterization for 5G vehicle-to-vehicle communications. Measurement: Journal of the International Measurement Confederation, 2017, 95, 223-229.	5.0	53
5	Measuring, modeling, and characterizing of indoor radio channel at 5.8 GHz. IEEE Transactions on Vehicular Technology, 2001, 50, 526-535.	6.3	51
6	Microstrip antenna for 5G broadband communications: Overview of design issues. , 2015, , .		46
7	PROPAGATION ANALYSIS AND DEPLOYMENT OF A WIRELESS SENSOR NETWORK IN A FOREST. Progress in Electromagnetics Research, 2010, 106, 121-145.	4.4	41
8	Building material characterization from complex transmissivity measurements at 5.8 GHz. IEEE Transactions on Antennas and Propagation, 2000, 48, 1269-1271.	5.1	32
9	Permittivity and Conductivity Measurements of Building Materials at 5.8 GHz and 41.5 GHz. Wireless Personal Communications, 2002, 20, 93-100.	2.7	30
10	A 2D Ray-Tracing Based Model for Micro- and Millimeter-Wave Propagation Through Vegetation. IEEE Transactions on Antennas and Propagation, 2014, 62, 6443-6453.	5.1	28
11	RMS Delay Spread vs. Coherence Bandwidth from 5G Indoor Radio Channel Measurements at 3.5 GHz Band. Sensors, 2020, 20, 750.	3.8	23
12	Urban Wide-Band Measurement of the UMTS Electromagnetic Environment. IEEE Transactions on Vehicular Technology, 2004, 53, 1014-1022.	6.3	21
13	Interference and impairments in radio communication systems due to industrial shot noise. , 2007, , .		18
14	Wideband Analysis of the Satellite Communication Channel at Ku- and X-Bands. IEEE Transactions on Vehicular Technology, 2016, 65, 2787-2790.	6.3	18
15	Electromagnetic field level temporal variation in urban areas. Electronics Letters, 2005, 41, 233.	1.0	17
16	Improvement of Wideband Radio Channel Swept Time-Delay Cross-Correlation Sounders by Using Golay Sequences. IEEE Transactions on Vehicular Technology, 2007, 56, 362-368.	6.3	16
17	Time-Variant Radio Channel Characterization and Modelling of Vegetation Media at Millimeter-Wave Frequency. IEEE Transactions on Antennas and Propagation, 2012, 60, 1557-1568.	5.1	15
18	Signaling Through Scattered Vegetation: Empirical Loss Modeling for Low Elevation Angle Satellite Paths Obstructed by Isolated Thin Trees. IEEE Vehicular Technology Magazine, 2016, 11, 22-28.	3.4	15

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19	A 2D Ray-Tracing Based Model for Wave Propagation Through Forests at Micro-and Millimeter Wave Frequencies. IEEE Access, 2018, 6, 32097-32108.	4.2	15
20	Novel Procedure to Determine Statistical Functions of Impulsive Noise. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 559-568.	2.2	14
21	A Study of the Correlation Between Horizontal and Vertical Polarizations of Impulsive Noise in UHF. IEEE Transactions on Vehicular Technology, 2007, 56, 2844-2849.	6.3	14
22	Modelling and Measuring Reflection Due to Flat Dielectric Surfaces at 5.8 GHz. IEEE Transactions on Antennas and Propagation, 2007, 55, 1139-1147.	5.1	14
23	Semi-Markov Model for Low-Elevation Satelliteâ€"Earth Radio Propagation Channel. IEEE Transactions on Antennas and Propagation, 2012, 60, 2481-2490.	5.1	14
24	A Three-Dimensional Directive Antenna Pattern Interpolation Method. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 881-884.	4.0	14
25	Microcellular Radio Channel Characterization at 60 GHz for 5G Communications. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 1476-1479.	4.0	14
26	Analysis of the performance of vegetation barriers to reduce electromagnetic pollution. IET Microwaves, Antennas and Propagation, 2011, 5, 651.	1.4	13
27	Measurement, Characterization, and Modeling of the Helicopter Satellite Communication Radio Channel. IEEE Transactions on Antennas and Propagation, 2014, 62, 3776-3785.	5.1	13
28	Will COTS RF Front-Ends Really Cope With 5G Requirements at mmWave?. IEEE Access, 2018, 6, 38745-38769.	4.2	13
29	Cochannel and adjacent channel interference in actual terrestrial TV scenarios - part I: field measurements. IEEE Transactions on Broadcasting, 2002, 48, 111-115.	3.2	12
30	Measurements and analysis of the indoor wideband millimeter wave wireless radio channel and frequency diversity characterization. IEEE Transactions on Antennas and Propagation, 2003, 51, 2974-2986.	5.1	12
31	Vegetal barriers for minimising electromagnetic pollution at cellular phone bands. Electronics Letters, 2005, 41, 340.	1.0	12
32	Depolarization Due to Scattering on Walls in the 5 GHz Band. IEEE Transactions on Antennas and Propagation, 2009, 57, 1804-1812.	5.1	12
33	Shrub-blown time variability in attenuation and scattering at cellular frequencies. IET Microwaves, Antennas and Propagation, 2010, 4, 526.	1.4	12
34	Design of compact wideband multiâ€band and ultrawideband band pass filters based on coupled half wave resonators with reduced coupling gap. IET Microwaves, Antennas and Propagation, 2015, 9, 1786-1792.	1.4	12
35	Experimental analysis of propagation at 62 GHz in suburban mobile radio microcells. IEEE Transactions on Vehicular Technology, 1999, 48, 576-588.	6.3	11
36	Coherence bandwidth characterization in an urban microcell at 62.4 GHz. IEEE Transactions on Vehicular Technology, 2000, 49, 607-613.	6.3	11

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37	Radio-Electric Validation of an Electronic Cowbell Based on ZigBee Technology. IEEE Antennas and Propagation Magazine, 2011, 53, 40-44.	1.4	11
38	Spatial diversity analysis for digital TV systems. IEEE Transactions on Broadcasting, 2001, 47, 198-206.	3.2	10
39	Wide-Band Measurements of Nondeterministic Effects on the BRAN Indoor Radio Channel. IEEE Transactions on Vehicular Technology, 2004, 53, 1167-1175.	6.3	10
40	Mitigation of impulsive noise in digital video broadcasting terrestrial using orthogonal polarization reception. IEEE Transactions on Consumer Electronics, 2009, 55, 1798-1804.	3.6	10
41	Method to Cancel Impulsive Noise From Power-Line Communication Systems by Processing the Information in the Idle Carriers. IEEE Transactions on Power Delivery, 2012, 27, 2421-2422.	4.3	10
42	A 3-D Model for Millimeter-Wave Propagation Through Vegetation Media Using Ray-Tracing. IEEE Transactions on Antennas and Propagation, 2019, 67, 4313-4318.	5.1	10
43	Ultra wideband and tri-band antennas for satellite applications at C-, X-, and Ku bands. , 2014, , .		9
44	A Simple Model for Average Reradiation Patterns of Single Trees Based on Weighted Regression at 60 GHz. IEEE Transactions on Antennas and Propagation, 2015, 63, 5113-5118.	5.1	9
45	Modeling and measuring depolarization by building obstacles in the 41.5 GHz band. Microwave and Optical Technology Letters, 2000, 24, 34-36.	1.4	8
46	Generating Impulsive Noise [Wireless Corner. IEEE Antennas and Propagation Magazine, 2010, 52, 168-173.	1.4	8
47	Uncertainty Assessment of a Small Rectangular Anechoic Chamber: From Design to Operation. IEEE Transactions on Antennas and Propagation, 2020, 68, 4871-4880.	5.1	8
48	Performance evaluation of W-CDMA in actual impulsive noise scenarios using adaptive antennas. IET Communications, 2004, 151, 589.	1.0	7
49	Benefits of using Golay sequences in channel swept time cross-correlation sounders. , 2005, , .		7
50	Indoor Radio Reception at 60 GHz: Fading Mitigation Using Diversity Techniques. IEEE Transactions on Antennas and Propagation, 2009, 57, 2934-2939.	5.1	7
51	Wideband Channel Characterization for Low-Elevation Satellites in L-Band. IEEE Transactions on Antennas and Propagation, 2013, 61, 2231-2240.	5.1	7
52	Improving Capability of Detecting Impulsive Noise. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 66-73.	2.2	7
53	Millimeter-Wave Communications. Electronics (Switzerland), 2020, 9, 251.	3.1	7
54	Dual-Band Single-Layer Fractal Frequency Selective Surface for 5G Applications. Electronics (Switzerland), 2021, 10, 2880.	3.1	7

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55	Normal-incidence transmission of radio waves through building materials in the 5.8 GHz frequency band. Microwave and Optical Technology Letters, 1999, 23, 7-12.	1.4	6
56	Analysis of polarization diversity at digital TV indoor receivers. IEEE Transactions on Broadcasting, 2000, 46, 233-239.	3.2	6
57	SENSOR AREA NETWORK FOR ACTIVE RTLS IN RFID TRACKING APPLICATIONS AT 2.4GHZ. Progress in Electromagnetics Research, 2010, 110, 43-58.	4.4	6
58	Cell interleaving against impulsive noise in OFDM. IEEE Transactions on Consumer Electronics, 2012, 58, 269-273.	3.6	6
59	Performance Analysis of Polarization Diversity for Indoor Scenarios at 41.4â€‰GHz and 61.5â€‰GHz. International Journal of Antennas and Propagation, 2012, 2012, 1-8.	1.2	6
60	Cochannel and adjacent channel interference in actual terrestrial TV scenarios - part II: MATV systems laboratory tests. IEEE Transactions on Broadcasting, 2002, 48, 116-122.	3.2	5
61	Shot noise in actual urban and industrial environments. Microwave and Optical Technology Letters, 2002, 34, 112-115.	1.4	5
62	Low sidelobe level radar techniques using Golay based coded sequences. , 2008, , .		5
63	Elimination of Impulsive Noise by Double Detection in Long Term Evolution Handsets. IEEE Transactions on Vehicular Technology, 2014, , 1-1.	6.3	5
64	Experimental assessment of propagation models over sea for UHF and X bands. , 2016, , .		5
65	Wideband Performance Comparison between the 40 GHz and 60 GHz Frequency Bands for Indoor Radio Channels. Electronics (Switzerland), 2019, 8, 1234.	3.1	5
66	Validation of 3D simulation tool for radio channel modeling at 60ÂGHz: A meeting point for empirical and simulation-based models. Measurement: Journal of the International Measurement Confederation, 2020, 163, 108038.	5.0	5
67	An improved method to process measured radio-channel impulse responses. Microwave and Optical Technology Letters, 2000, 24, 158-162.	1.4	4
68	Study of a frequency diversity system for indoor digital TV. IEEE Transactions on Broadcasting, 2000, 46, 165-170.	3.2	4
69	Estimating channel performance for time invariant channels. Electronics Letters, 2004, 40, 746.	1.0	4
70	Wind Incidence Effects on Channel Dynamics in Vegetation Media at 40 GHz. , 2006, , .		4
71	Space diversity performance in indoor radio channels at 40â€‰GHz. Electronics Letters, 2008, 44, 1209.	1.0	4
72	Reducing electromagnetic pollution by shrub lines supported by lattice structures. Electronics Letters, 2009, 45, 664.	1.0	4

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73	Reconciling the ETSI coverage requirements for DVB-T with the ITU-R recommendations. Telecommunication Systems, 2014, 57, 217-222.	2.5	4
74	Single notched-band UWB antenna for WLAN environment using complementary split ring resonators CSRR and spiral resonator CSR. , 2015, , .		4
75	Design of compact multiband bandpass filter with suppression of second harmonic spurious by coupling gap reduction. Journal of Electromagnetic Waves and Applications, 2015, 29, 1813-1828.	1.6	4
76	Measuring <i>in situ</i> reflection coefficients due to road pavements at 5.9 GHz. Electronics Letters, 2016, 52, 2072-2074.	1.0	4
77	Coherence bandwidth measurements in a suburban microcell at 62.4 GHz. Electronics Letters, 1998, 34, 329.	1.0	3
78	Coherence bandwidth measurements in an indoor microcell at 62.4 GHz. Electronics Letters, 1998, 34, 429.	1.0	3
79	Furniture effects on the wideband indoor radio channel at microwave frequencies. Microwave and Optical Technology Letters, 2001, 29, 336-340.	1.4	3
80	Design and implementation of a golay-based GPR system for improved subsurface imaging. , 2007, , .		3
81	Real-time method for human presence detection by using micro-Doppler signatures information at 24GHz. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	3
82	Urban Cellular Network Planning Imbalances in Wooded Streets and Parks [Wireless Corner]. IEEE Antennas and Propagation Magazine, 2011, 53, 197-204.	1.4	3
83	Estimation of diversity improvement for satellite-to-helicopter radio channel at Ku-Band. , 2014, , .		3
84	Extension of the dRET Model to Forests of Thin Cylinders. IEEE Transactions on Antennas and Propagation, 2015, 63, 4049-4056.	5.1	3
85	A Two-Dimensional Ray-Tracing-Based Model for Propagation Through Vegetation: A practical assessment using ornamental plants at 60 GHz. [Wireless Corner]. IEEE Antennas and Propagation Magazine, 2017, 59, 145-150.	1.4	3
86	Empirical Modeling of Radiowave Angular Power Distributions in Different Propagation Environments at 60 GHz for 5G. Electronics (Switzerland), 2018, 7, 365.	3.1	3
87	A Comparison of Empirical and Ray-Tracing Models for Indoor Radio-Wave Propagation [Wireless Corner]. IEEE Antennas and Propagation Magazine, 2020, 62, 107-115.	1.4	3
88	Using Vegetation Barriers to Improving Wireless Network Isolation and Security. Communications in Computer and Information Science, 2009, , 428-438.	0.5	3
89	DETERMINATION OF SAFETY VOLUMES FOR MEDIUM-FREQUENCY EMISSIONS UNDER STANDARD LIMITS OF HUMAN EXPOSURE. Journal of Electromagnetic Waves and Applications, 2003, 17, 1605-1611.	1.6	2
90	WLANs site shielding by means of trees and shrubbery. , 2006, , .		2

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91	Wind effect on the scattering from vegetation at cellular phone frequencies. , 2007, , .		2
92	Development of a Tracking and Automatic Distress Generation System for Coastal Fleet Ships. , 2007, , .		2
93	Radioelectric propagation in mature wet forests at 5.8 GHz. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	2
94	Platform for teaching of location technologies based on Zigbee Wireless Sensor Networks by learning-through-play theory. , 2010, , .		2
95	Viability of a coastal tracking and distress beacon system based on cellular phone networks. IET Microwaves, Antennas and Propagation, 2011, 5, 1265.	1.4	2
96	EXTENDED OPTIMAL FILTERS FOR ADAPTIVE-ONTRANSMIT RADAR SYSTEMS USING BINARY CODES. Progress in Electromagnetics Research, 2012, 130, 41-66.	4.4	2
97	Performance analysis of angle diversity for direction finding in 2.4â€¦GHz tracking applications. IET Communications, 2012, 6, 147.	2.2	2
98	Development of a calculator for Edge and Parallel Coupled Microstrip band pass filters. , 2014, , .		2
99	Seeking clues to promote the participation of women in electrical engineering studies. , 2014, , .		2
100	High speed transmission at 60 GHz for 5G communications. , 2015, , .		2
101	Computing the Influence of EnvironmentalConditions in Electromagnetic Measurements Uncertainty. IEEE Transactions on Antennas and Propagation, 2019, 67, 4084-4090.	5.1	2
102	Level Variability of Radio Signals Propagating Through Fire: Experimental measurements and results. IEEE Antennas and Propagation Magazine, 2022, 64, 62-69.	1.4	2
103	Wideband measurements for Multimedia Wireless System radio links. Microwave and Optical Technology Letters, 2002, 34, 224-227.	1.4	1
104	Fixing Limits to Free-Access Areas Around Broadcast Antennas. IEEE Transactions on Antennas and Propagation, 2004, 52, 2802-2806.	5.1	1
105	Measurement and analysis of depolarization generated by scattering over constructive obstacles at 5.8 GHz. , 2007, , .		1
106	Incidence angle estimation algorithm for a low-cost AoA BASED INDOOR location system. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	1
107	Analysis of channel capacity for fixed broadband multimedia systems at 40â€¦GHz. IET Microwaves, Antennas and Propagation, 2011, 5, 637.	1.4	1
108	Eliminating man-made noise from PLC systems by taking advantage of the masked tones. , 2012, , .		1

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109	A Cognitive Mobile BTS Solution with Software-Defined Radioelectric Sensing. Sensors, 2013, 13, 2051-2075.	3.8	1
110	Production, measurement and simulation of a low mass flex cable for multi gigabit/s readout for the LHCb VELO upgrade. Journal of Instrumentation, 2013, 8, C01018-C01018.	1.2	1
111	Statistical model for satellite to helicopter radio channel. , 2014, , .		1
112	Detection of malicious base station attacks through the carrier analysis. , 2015, , .		1
113	Selectivity improvement in dual-band band pass filter by coupled complementary split ring resonators. , 2015, , .		1
114	An UTD ray tracing model for satellite-to-helicopter aeronautical radio channel analysis. , 2016, , .		1
115	Experimental assessment of excess loss prediction models for satelliteâ€toâ€Earth radio links shadowed by single inâ€leaf trees. IET Microwaves, Antennas and Propagation, 2016, 10, 141-146.	1.4	1
116	Uncertainty in Field-Level Measurements of LTE Signals Associated With User Load. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 596-599.	4.0	1
117	Radio Channel Scattering in a 28 GHz Small Cell at a Bus Stop: Characterization and Modelling. Electronics (Switzerland), 2020, 9, 1556.	3.1	1
118	SimuMANET. , 2012, , 408-443.		1
119	Effect of Space Diversity for Fading Mitigation at 40 and 60 GHz Indoor Channels. , 2022, , .		1
120	Analysis of millimetric wave propagation in a sub-urban microcell. Electronics Letters, 1997, 33, 530.	1.0	0
121	Modelling of Propagation in Outdoor Microcells at 62.4GHz. , 1997, , .		0
122	EGPROM: An empirical-geometrical propagation model to simulate radio wave propagation and diversity reception. Computer Applications in Engineering Education, 1999, 7, 120-132.	3.4	0
123	Open-hexagon tilted patch antenna for terrestrial digital TV reception. Microwave and Optical Technology Letters, 2002, 32, 56-60.	1.4	0
124	Inside-outside lift power-level statistics at universal mobile telecommunications system (UMTS) frequency. Microwave and Optical Technology Letters, 2002, 32, 122-124.	1.4	0
125	Study of wideband propagation in millimetric band. , 2006, , .		0
126	Measurement and analysis of scattering from periodic surfaces at 5.8 GHz. , 2007, , .		0

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127	ARaCS: Educational software for radio channel characterization with swept-time delay cross-correlation sounders. , 2009, , .		0
128	Design of a pseudorandom reference codes for reduced sidelobes and spectrally clean out-of-band emissions using an extended optimal filtering approach. , 2010, , .		0
129	Intrasymbol interference in OFDM. IEEE Transactions on Consumer Electronics, 2010, 56, 447-449.	3.6	0
130	Detecting man-made noise by using its wideband characteristic. , 2012, , .		0
131	SimuMANET: Collaborative development of an open-source based remote tool for the lab. , 2012, , .		0
132	Characterization of baseband demodulated man-made noise. , 2012, , .		0
133	Impulsive noise remotion by inspection of the masked tones at PLC receivers. , 2012, , .		0
134	Using polarization diversity to detect and analyze impulsive noise. IEEE Electromagnetic Compatibility Magazine, 2012, 1, 39-45.	0.1	0
135	Experimental distribution functions for analysis of coherence bandwidth fluctuations for a fixed broadband wireless access system. IET Microwaves, Antennas and Propagation, 2012, 6, 450.	1.4	0
136	How to exploit bandwidth to detect impulsive noise. , 2012, , .		0
137	L-band LMS impairment mitigation by using diversity at the receiver. , 2013, , .		0
138	Comparison of power fading models due to vegetation for a satellite-to-earth radiolink at Ku band. , 2014, , .		0
139	A simple graphical calculator based on a new synthesis formulas to design a bandpass filters for wireless applications. , 2014, , .		0
140	Experimental verification of a new analytical procedure to design a compact bandpass filters for ISM and WiMAX applications. , 2014, , .		0
141	The influence of gender in the adoption of engineering studies. , 2014, , .		0
142	Stacked CPW-fed antenna for satellite applications with gain enhancement. , 2015, , .		0
143	Development of 3D human tissues phantoms for analysis of frequency dispersion and human body interaction at 60GHz. , 2015, , .		0
144	A feasibility study on the extension of the point scatterer formulation to raised canopy forests. , 2016, , .		0

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145	Identifying radio waves direction of arrival by Doppler deviation along linear paths at 5.8 GHz. , 2017, , .		0
146	Analysis of electromagnetic measurements in intercomparisons with low number of participants. , 2017, , .		0
147	Input parameter extraction method for point scatterer formulation in vegetation media at millimetre€wave frequencies. IET Microwaves, Antennas and Propagation, 2017, 11, 165-170.	1.4	0
148	Physical-layer frequency-based schemes to improve 5.8 GHz links in presence of people moving. , 2017, , .		0
149	A Wideband Radio Channel Sounder for Non-Stationary Channels: Design, Implementation and Testing. Electronics (Switzerland), 2021, 10, 1838.	3.1	0
150	Validation of a Wideband Simulation Tool for Indoor Radio Propagation. Kluwer International Series in Engineering and Computer Science, 2002, , 301-331.	0.2	0
151	Evaluation of the Performance of Polarization Diversity Estimated from Measurements at One Polarization. Communications in Computer and Information Science, 2012, , 410-423.	0.5	0
152	ENXENO: LEGOÂ© Robots from University Lab to K-12 Classroom. Elektronika Ir Elektrotechnika, 2012, 118, .	0.8	0
153	From the Farm to Fork. , 2013, , 237-270.		0
154	Real-Time Traceability with Sensing in RFID Applications. , 2013, , 213-236.		0
155	Debilities of the UMTS Security Mode Set-Up Procedure and Attacks against UMTS/HSPA Device. Advances in Information Security, Privacy, and Ethics Book Series, 2015, , 1-45.	0.5	0
156	Simulation of Radio Channel and Modulation Schemes Using Markov Chains. , 2006, , 325-334.		0
157	Frequency dependence of fire-induced signal level variability. , 2022, , .		0
158	Frequency dependence of dielectric constant of construction materials in microwave and millimeter€wave bands. Microwave and Optical Technology Letters, 2001, 30, 123-124.	1.4	0