Jorge R. Costa

List of Publications by Year
in descending order

131	2,533	186265	223800
papers	citations	28 h-index	46 g-index

131	131	131	2010
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Systematic Analysis of Microwave Breast Imaging Detection of Different-Sized Malignant and Benign Tumors. , 2022, , .		3
2	Experimental Evaluation of Thin Bone Fracture Detection Using Microwave Imaging. , 2022, , .		4
3	Evaluation of a Dielectric-Only Transmitarray for Generating Multi-Focusing Near-Field Spots Using a Cluster of Feeds in the Ka-Band. Sensors, 2021, 21, 422.	3.8	3
4	Preliminary Characterization of Microwave Backscattering of Floating Plastic. , 2021, , .		4
5	Comparison of Slot-based and Vivaldi Antennas for Breast Tumor Detection using Machine Learning and Microwave Imaging Algorithms. , 2021, , .		4
6	Numerical Assessment of Microwave Imaging for Axillary Lymph Nodes Screening Using Anthropomorphic Phantom. , 2021, , .		4
7	Transmit-array antenna with aberration-free wide-angle scanning using mechanical in-plane movements. , 2021, , .		0
8	A study on the sensitivity of microwave imaging for detecting small-width bone fractures. , 2021, , .		3
9	Study of Freezing and Defrosting Effects on Complex Permittivity of Biological Tissues. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 2210-2214.	4.0	4
10	Microwave Breast Imaging Using a Dry Setup. IEEE Transactions on Computational Imaging, 2020, 6, 167-180.	4.4	34
11	Development of a Transmission-Based Open-Ended Coaxial-Probe Suitable for Axillary Lymph Node Dielectric Measurements. , 2020, , .		3
12	Equivalent Dielectric Description of Transmit-arrays as an efficient and accurate method of analysis. , 2020, , .		0
13	Development of an Anthropomorphic Phantom of the Axillary Region for Microwave Imaging Assessment. Sensors, 2020, 20, 4968.	3.8	11
14	Antenna Phase Center and Angular Dispersion Estimation Using Planar Acquisition Setup Applied to Microwave Breast Imaging. , 2020, , .		1
15	Bessel Beam Generation Using Dielectric Planar Lenses at Millimeter Frequencies. IEEE Access, 2020, 8, 216185-216196.	4.2	10
16	Equivalent Circuit Modeling to Design a Dual-Band Dual Linear-to-Circular Polarizer Surface. IEEE Transactions on Antennas and Propagation, 2020, 68, 5730-5735.	5.1	21
17	3D-Printed transmit-array antenna for broadband backhaul 5G links at V band. IEEE Antennas and Wireless Propagation Letters, 2020, , 1-1.	4.0	8
18	Reducing Beam Aberrations of Mechanical Scanning Transmit-array Antennas. , 2020, , .		1

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19	Applying Massively Parallel Computing to Multiscale Ka Dual-Band Transmit-Array Analysis Using FETI-2LM. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2020, 5, 235-244.	2.2	5
20	Wrist-Worn RFID Antenna Printed on Additive Manufactured Flexible Substrate. , 2019, , .		1
21	Efficient Evaluation of Gradient Transmit-Arrays Through an Equivalent Dispersive Dielectric Description. IEEE Transactions on Antennas and Propagation, 2019, 67, 5997-6007.	5.1	3
22	Multiple-Beam Focal-Plane Dual-Band Fabryâ€“PÃ©rot Cavity Antenna With Reduced Beam Degradation. IEEE Transactions on Antennas and Propagation, 2019, 67, 4348-4356.	5.1	8
23	Antenna Design and Near-Field Characterization for Medical Microwave Imaging Applications. IEEE Transactions on Antennas and Propagation, 2019, 67, 4811-4824.	5.1	45
24	Dual-Band Skin-Adhesive Repeater Antenna for Continuous Body Signals Monitoring. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2018, 2, 25-32.	3.4	31
25	Phase-Delay Versus Phase-Rotation Cells for Circular Polarization Transmit Arraysâ€”Application to Satellite Ka-Band Beam Steering. IEEE Transactions on Antennas and Propagation, 2018, 66, 1236-1247.	5.1	43
26	Integrated Lens Antennas. Signals and Communication Technology, 2018, , 3-36.	0.5	7
27	Phase-only Shaped Beam Transmit-Array. , 2018, , .		0
28	Low-Cost Wide-Band V-Band Patch Antenna on FR4 PCB. , 2018, , .		2
29	Wide-angle mechanical scanning Transmit-arrays for Satellite Ka-band user terminals. , 2018, , .		4
30	Dual-Band Dual-Linear-to-Circular Polarization Converter in Transmission Mode Application to <inline-formula> <tex-math notation="LaTeX">K/Ka </tex-math> </inline-formula>-Band Satellite Communications. IEEE Transactions on Antennas and Propagation, 2018, 66, 7128-7137.	5.1	158
31	Synthesis of Shaped-Beam Radiation Patterns at Millimeter-Waves Using Transmit Arrays. IEEE Transactions on Antennas and Propagation, 2018, 66, 4017-4024.	5.1	19
32	Wideband and High-Selectivity Dual-Band Filter for Ka-Band Satellite Antennas. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 1627-1630.	4.0	3
33	17.8 A compact 130GHz fully packaged point-to-point wireless system with 3D-printed 26dBi lens antenna achieving 12.5Gb/s at 1.55pJ/b/m. , 2017, , .		22
34	Stereolithography-Based Antennas for Satellite Communications in Ka-Band. Proceedings of the IEEE, 2017, 105, 655-667.	21.3	46
35	High Gain Dual-Band Beam-Steering Transmit Array for Satcom Terminals at Ka-Band. IEEE Transactions on Antennas and Propagation, 2017, 65, 3528-3539.	5.1	106
36	Generic formulation for transmit-array dual-band unit-cell design. , 2017, , .		0

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37	Link budget study and realization of time-domain measurement setup for implantable antennas. , 2017, , .		0
38	Experimental verification of â€˜waveguideâ€™ plasmonics. New Journal of Physics, 2017, 19, 123017.	2.9	19
39	Ball Grid Array Module With Integrated Shaped Lens for 5G Backhaul/Fronthaul Communications in F-Band. IEEE Transactions on Antennas and Propagation, 2017, 65, 6380-6394.	5.1	36
40	Low-cost plastic lens fabricated in FDM 3D-printing technology targeting high data rate wireless links above 200 GHz. , 2017, , .		0
41	Focal-Plane Multibeam Dual-Band Dielectric Lens for Ka-Band. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 432-436.	4.0	7
42	Low-cost 60 GHz 3D printed lens fed by a planar source with WR15 transition integrated on FR4 PCB. , 2017, , .		2
43	Antenna-filter-antenna-based cell for linear-to-circular polarizer transmit-array. , 2017, , .		5
44	Miniaturized implantable patch antenna for near-field communication at ISM band. , 2017, , .		2
45	Transmit array as a viable 3D printing option for backhaul applications at V-band. , 2017, , .		2
46	Threeâ€dimensional printed ABS plastic peanutâ€lens with integrated ball grid array module for highâ€dataâ€rate communications in Fâ€band. IET Microwaves, Antennas and Propagation, 2017, 11, 2021-2026.	1.4	1
47	Low-cost 3D-printed 240 GHz plastic lens fed by integrated antenna in organic substrate targeting sub-THz high data rate wireless links. , 2017, , .		11
48	Assessment of FETI DDM methodologies for the simulation of high gain Ka-band transmit arrays. , 2017, , .		1
49	Complex permittivity and anisotropy measurement of 3D-printed PLA at microwaves and millimeter-waves. , 2016, , .		53
50	Low-profile wideband stick-on antenna for body-area communication. , 2016, , .		0
51	Prototype of a compact mechanically steered Ka-band antenna for satellite on-the-move. , 2016, , .		6
52	Dielectric Lens Antennas. , 2016, , 1001-1064.		25
53	Comparing liquid homogeneous and multilayer phantoms for human body implantable antennas. , 2016, , .		6
54	Design of a 40 dBi planar bifocal lens for mechanical beam steering at Ka-band. , 2016, , .		13

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55	Ball Grid Array-Module With Integrated Shaped Lens for WiGig Applications in Eyewear Devices. IEEE Transactions on Antennas and Propagation, 2016, 64, 872-882.	5.1	17
56	3D printing technology: Enabling innovative & cost effective industrial antenna solution. , 2016, , .		6
57	Wideband Implantable Antenna for Body-Area High Data Rate Impulse Radio Communication. IEEE Transactions on Antennas and Propagation, 2016, 64, 1932-1940.	5.1	26
58	RFID-based Smart Blood Stock System [Education Column]. IEEE Antennas and Propagation Magazine, 2015, 57, 54-65.	1.4	12
59	Influence of body placement on low profile UWB antenna off-body ranging performance. , 2015, , .		0
60	Millimeter-wave antenna-in-package solutions for WiGig and backhaul applications. , 2015, , .		9
61	Noncollimating MMW Polyethylene Lens Mitigating Dual-Source Offset From a Tx/Rx WiGig Module. IEEE Transactions on Antennas and Propagation, 2015, 63, 5908-5913.	5.1	8
62	Tx-Rx Lens-Based Satellite-on-the-Move Ka-Band Antenna. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1408-1411.	4.0	21
63	Review of 20 Years of Research on Microwave and Millimeter-wave Lenses at "Instituto de TelecomunicaÃ§oËœes". IEEE Antennas and Propagation Magazine, 2015, 57, 249-268.	1.4	16
64	A planar feed for SOTM Ka-band lens antennas. , 2015, , .		1
65	Circular Polarization Wide-Angle Beam Steering at Ka-Band by In-Plane Translation of a Plate Lens Antenna. IEEE Transactions on Antennas and Propagation, 2015, 63, 5443-5455.	5.1	149
66	Dielectric Lens Antennas. , 2015, , 1-54.		7
67	Design and Ranging Performance of a Low-profile UWB Antenna for WBAN Localization Applications. IEEE Transactions on Antennas and Propagation, 2014, 62, 6420-6427.	5.1	19
68	A 120 GHz 3D-printed plastic elliptical lens antenna with an IPD patch antenna source. , 2014, , .		13
69	Reversed rainbow with a nonlocal metamaterial. Applied Physics Letters, 2014, 105, .	3.3	8
70	Low profile UWB antenna for Wireless Body Area Networks. , 2014, , .		1
71	Design of a UWB stacked antenna for body area network applications. , 2014, , .		0
72	3D printed plastic 60 GHz lens: Enabling innovative millimeter wave antenna solution and system. , 2014, , .		43

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73	A Broadband Implantable and a Dual-Band On-Body Repeater Antenna: Design and Transmission Performance. IEEE Transactions on Antennas and Propagation, 2014, 62, 2899-2908.	5.1	83
74	A Graphical Aid for the Complex Permittivity Measurement at Microwave and Millimeter Wavelengths. IEEE Microwave and Wireless Components Letters, 2014, 24, 421-423.	3.2	8
75	Spatially Confined UHF RFID Detection With a Metamaterial Grid. IEEE Transactions on Antennas and Propagation, 2014, 62, 378-384.	5.1	9
76	Design and analysis of a Ka-band coaxial-to-quad-ridged circular waveguide transition. , 2014, , .		4
77	FSS design for dual-band and low profile Fabry-Pérot antenna at Ka-band. , 2014, , .		1
78	Comparizon of 3D printed Plastic and micromachined Teflon Lenses for WiGig modules. , 2014, , .		2
79	Viability of wallâ€embedded tag antenna for ultraâ€wideband realâ€time suitcase localisation. IET Microwaves, Antennas and Propagation, 2014, 8, 423-428.	1.4	6
80	RFID chip characterization through S-parameter measurements and gene expression programming. , 2014, , .		1
81	Hybrid UHF/UWB Antenna for Passive Indoor Identification and Localization Systems. IEEE Transactions on Antennas and Propagation, 2013, 61, 354-361.	5.1	74
82	Broadband UHF RFID Passive Tag Antenna for Near-Body Applications. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 136-139.	4.0	39
83	UWB Real Time Localization platform for fast system performance evaluation. , 2013, , .		2
84	Guest Editorial for the Special Issue on Antennas and Propagation at mm- and Sub mm-Waves. IEEE Transactions on Antennas and Propagation, 2013, 61, 1502-1507.	5.1	3
85	DUAL-BAND IMPLANTABLE ANTENNAS FOR MEDICAL TELEMETRY: A FAST DESIGN METHODOLOGY AND VALIDATION FOR INTRA-CRANIAL PRESSURE MONITORING. Progress in Electromagnetics Research, 2013, 141, 161-183.	4.4	23
86	Feasibility study of suitcase identification and imaging Using a UWB tag. , 2012, , .		1
87	Broadband UHF RFID passive tag antenna for near-body operation. , 2012, , .		6
88	Design of a passive tag for indoor localization. , 2012, , .		2
89	Miniature Implantable Antennas for Biomedical Telemetry: From Simulation to Realization. IEEE Transactions on Biomedical Engineering, 2012, 59, 3140-3147.	4.2	64
90	Passive UHF RFID Tag for Airport Suitcase Tracking and Identification. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 123-126.	4.0	30

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91	Evaluation of a New Wideband Slot Array for MIMO Performance Enhancement in Indoor WLANs. IEEE Transactions on Antennas and Propagation, 2011, 59, 1200-1206.	5.1	51
92	Mirror-Integrated Transparent Antenna for RFID Application. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 776-779.	4.0	29
93	RFID Reader Antennas for Tag Detection in Self-Confined Volumes at UHF. IEEE Antennas and Propagation Magazine, 2011, 53, 39-50.	1.4	63
94	Resolving subwavelength objects with a crossed wire mesh superlens operated in backscattering mode. New Journal of Physics, 2011, 13, 053004.	2.9	7
95	UHF RFID cabinet. , 2011, , .		1
96	Impact of a new wideband slot array on MIMO indoor system performance. , 2011, , .		0
97	Tapered waveguide feed for integrated dielectric lens antenna performance tests. , 2011, , .		5
98	Passive UHF RFID smart polling device. , 2010, , .		0
99	Broadband reflector fed by integrated lens antenna with frequency constant directivity. , 2010, , .		4
100	Development of an indoor Wireless Personal Area Network based on mechanically steered millimeter-wave lens antenna. , 2010, , .		5
101	Experimental verification of broadband superlensing using a metamaterial with an extreme index of refraction. Physical Review B, 2010, 81, .	3.2	31
102	Broadband Integrated Lens for Illuminating Reflector Antenna With Constant Aperture Efficiency. IEEE Transactions on Antennas and Propagation, 2010, 58, 3805-3813.	5.1	31
103	Antenna phase center determination from amplitude measurements using a focusing lens. , 2010, , .		11
104	Broadband superlensing using a metamaterial with an extreme index of refraction: Salient features, physical principles and analytical modeling. , 2010, , .		0
105	Wideband Slot Antenna for WLAN Access Points. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 79-82.	4.0	38
106	Low-cost mechanically steered millimeter-wave lens antenna system for indoor LANs. , 2010, , .		2
107	UHF RFID smart conveyor belt with confined detection range. , 2009, , .		10
108	Optimization of mechanically beam-steerable lens antenna profile for 60GHz wireless communications. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	1

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109	Design of double material integrated scanning lens antennas. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	1
110	Compact Beam-Steerable Lens Antenna for 60-GHz Wireless Communications. IEEE Transactions on Antennas and Propagation, 2009, 57, 2926-2933.	5.1	101
111	Compact Tapered Slot UWB Antenna With WLAN Band Rejection. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 661-664.	4.0	36
112	Performance of a Crossed Exponentially Tapered Slot Antenna for UWB Systems. IEEE Transactions on Antennas and Propagation, 2009, 57, 1345-1352.	5.1	48
113	UWB crossed exponentially tapered slot antenna with WLAN band rejection. , 2009, , .		1
114	MEMS reconfigurable stacked antenna for WLAN applications. , 2008, , .		4
115	Compact Ka-Band Lens Antennas for LEO Satellites. IEEE Transactions on Antennas and Propagation, 2008, 56, 1251-1258.	5.1	75
116	Electromagnetic Characterization of Textured Surfaces Formed by Metallic Pins. IEEE Transactions on Antennas and Propagation, 2008, 56, 405-415.	5.1	174
117	Crossed exponentially tapered slot antenna for UWB applications. , 2008, , .		1
118	Superlens made of a metamaterial with extreme effective parameters. Physical Review B, 2008, 78, .	3.2	27
119	Evaluation of a Double-Shell Integrated Scanning Lens Antenna. IEEE Antennas and Wireless Propagation Letters, 2008, 7, 781-784.	4.0	33
120	RFID Smart Shelf With Confined Detection Volume at UHF. IEEE Antennas and Wireless Propagation Letters, 2008, 7, 773-776.	4.0	53
121	ILASH - Software tool for the design of integrated lens antennas. , 2008, , .		16
122	Additional boundary condition for a wire medium connected to a metallic surface. New Journal of Physics, 2008, 10, 053011.	2.9	68
123	Experimental demonstration of a structured material with extreme effective parameters at microwaves. Applied Physics Letters, 2008, 93, 174103.	3.3	17
124	Design of a shaped double-shell lens feed for a quasi-optical reflector system. , 2007, , .		4
125	Broadband Slot Feed for Integrated Lens Antennas. IEEE Antennas and Wireless Propagation Letters, 2007, 6, 396-400.	4.0	25
126	Integrated imaging lens antenna with broadband feeds. , 2007, , .		8

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127	Benchmark of lens antennas for KA-band global earth observation from leo satellites. , 2006, , .		8
128	Modified split-step Fourier method for the numerical simulation of soliton amplification in erbium-doped fibers with forward-propagating noise. IEEE Journal of Quantum Electronics, 2001, 37, 145-152.	1.9	12
129	Numerical study of passive gain equalization with twin-core fiber coupler amplifiers for WDM systems. IEEE Journal of Quantum Electronics, 2001, 37, 1553-1561.	1.9	2
130	Multichannel soliton amplification in erbium-doped fiber amplifiers. Microwave and Optical Technology Letters, 1998, 19, 309-313.	1.4	3
131	Double-shell axial-symmetric imaging lens antenna for space applications. , 0, , .		3