

Iñigo Ederra

List of Publications by Year in descending order

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156
papers

2,324
citations

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156
all docs

156
docs citations

156
times ranked

2069
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison of a slotted SIW antenna covered with metasurface vs. a traditional array. , 2022, , .		0
2	Silicon Integrated Subharmonic Mixer on a Photonic-Crystal Platform. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 79-89.	2.0	8
3	Bullâ€™s-Eye Antenna With Circular Polarization at Millimeter Waves Based on Ridge Gap Waveguide Technology. IEEE Transactions on Antennas and Propagation, 2021, 69, 2376-2379.	3.1	2
4	Highly-Directive Cross-Polarized Backscatterers Integrated With a Ground Plane. IEEE Transactions on Antennas and Propagation, 2021, 69, 6739-6751.	3.1	1
5	Compact Bullâ€™s-Eye Antenna in Ridge Gap Waveguide with Circular Polarization at 60 GHz. , 2021, , .		0
6	Design of a Planar Antenna on a Photonic-Crystal Silicon Cavity for a Submillimetre Wave Receiver. , 2021, , .		0
7	Remote Sensing for Plant Water Content Monitoring: A Review. Remote Sensing, 2021, 13, 2088.	1.8	20
8	A Millimeter-Wave 4th-Harmonic Schottky Diode Mixer with Integrated Local Oscillator. Applied Sciences (Switzerland), 2021, 11, 7238.	1.3	1
9	Modified Soret Lenses for Dual-Band Integrated Detectors at Millimetre and Submillimetre Wavelengths. IEEE Transactions on Terahertz Science and Technology, 2020, 10, 107-117.	2.0	1
10	A Gap Waveguide Fed Circular Polarization Antennas in the Millimeter Wave Range. , 2020, , .		0
11	Design of Multiband Conformal Antenna for Sounding Rocket. , 2020, , .		2
12	A Gap Waveguide-Based Compact Rectangular Waveguide to a Packaged Microstrip Inline Transition. Applied Sciences (Switzerland), 2020, 10, 4979.	1.3	6
13	New Hexagonal CORPS-BFN for Multibeam Antenna Applications. , 2020, , .		0
14	Design of 300 GHz Combined Doubler/Subharmonic Mixer Based on Schottky Diodes with Integrated MMIC Based Local Oscillator. Electronics (Switzerland), 2020, 9, 2112.	1.8	4
15	Compact Groove Diamond Antenna in Gap Waveguide Technology With Broadband Circular Polarization at Millimeter Waves. IEEE Transactions on Antennas and Propagation, 2020, 68, 5778-5783.	3.1	12
16	Control of a quantum emitter's bandwidth by managing its reactive power. Physical Review A, 2019, 100, .	1.0	13
17	Water Content Continuous Monitoring of Grapevine Xylem Tissue Using a Portable Low-Power Cost-Effective FMCW Radar. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 5595-5605.	2.7	6
18	A Chebyshev Transformer-Based Microstri-to-Groove-Gap-Waveguide Inline Transition for MMIC Packaging. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1595-1602.	1.4	12

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19	Grating Lobes in Higher-Order Correlation Functions of Arrays of Quantum Emitters: Directional Photon Bunching Versus Correlated Directions. <i>Photonics</i> , 2019, 6, 14.	0.9	9
20	300 GHz Optoelectronic Transmitter Combining Integrated Photonics and Electronic Multipliers for Wireless Communication. <i>Photonics</i> , 2019, 6, 35.	0.9	9
21	Comparison of Fourth-harmonic and Combined Doubler/Subharmonic Mixer with integrated MMIC based Local Oscillator. , 2019, , .		0
22	Experimental Validation of a Ku-Band Dual-Circularly Polarized Metasurface Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , 2018, 66, 1153-1159.	3.1	27
23	Advanced Feeds for mm-Wave Antenna Systems. <i>Signals and Communication Technology</i> , 2018, , 75-110.	0.4	3
24	Dispersion Properties of an Elliptical Patch with Cross-Shaped Aperture for Synchronized Propagation of Transverse Magnetic and Electric Surface Waves. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 472.	1.3	1
25	A Simplified Design Inline Microstrip-to-Waveguide Transition. <i>Electronics (Switzerland)</i> , 2018, 7, 215.	1.8	19
26	Quantum antenna arrays: The role of quantum interference on direction-dependent photon statistics. <i>Physical Review A</i> , 2018, 97, .	1.0	13
27	Isotropic single-photon sources. <i>Optics Letters</i> , 2018, 43, 2736.	1.7	6
28	Characterization of a dual band metasurface antenna with broadside and isoflux circularly polarized radiation patterns. , 2017, , .		2
29	Implementation of a THz quasi-spiral antenna for THz-IR detector. , 2017, , .		0
30	Design of electronic subsystems for a 300 GHz wireless communication system. , 2017, , .		0
31	IR-Fresnel zone plate lens acting as THz antenna. , 2017, , .		3
32	Development of electronic subsystems for a terahertz wireless link. , 2017, , .		0
33	Dual-band integrated detector for THz and IR based on quasi-spiral antenna coupled to schottky diode. , 2016, , .		0
34	Towards a common integration platform for photonics and electronics. Challenges for assembly and packaging. , 2016, , .		0
35	Full W-band Microstrip Fed Vivaldi Antenna. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2016, 37, 786-794.	1.2	2
36	Dual Circularly Polarized Broadside Beam Metasurface Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , 2016, 64, 2944-2953.	3.1	64

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37	A quasi-spiral antenna for THz " IR dual-band sensors. , 2016, , .		0
38	Space Antennas Including Terahertz Antennas. , 2016, , 2913-2960.		2
39	Dual-pol metasurface antenna supporting transverse magnetic and electric surface waves. , 2016, , .		0
40	An inline microstrip-to-waveguide transition operating in the full W-Band based on a Chebyshev multisection transformer. , 2016, , .		10
41	Metasurface enhanced slot antennas. , 2016, , .		0
42	Theoretical design considerations for dual circularly-polarized broadside beam metasurface antenna. , 2016, , .		1
43	Schottky Diode <sup>th</sup>-harmonic mixer characterization at 440 GHz. , 2015, , .		0
44	An Inline Microstrip-to-Waveguide Transition Operating in the Full W-Band. Journal of Infrared, Millimeter, and Terahertz Waves, 2015, 36, 734-744.	1.2	16
45	Fourth-Harmonic Schottky Diode Mixer Development at Sub-Millimeter Frequencies. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 518-520.	2.0	20
46	Superbackscattering nanoparticle architectures. , 2015, , .		0
47	Superbackscattering nanoparticle dimers. Nanotechnology, 2015, 26, 274001.	1.3	6
48	Superbackscattering from single dielectric particles. Journal of Optics (United Kingdom), 2015, 17, 072001.	1.0	24
49	USE of COC substrates for millimeter-wave devices. Microwave and Optical Technology Letters, 2015, 57, 371-377.	0.9	19
50	Superbackscattering Antenna Arrays. IEEE Transactions on Antennas and Propagation, 2015, 63, 2011-2021.	3.1	12
51	ABA-regulation of root hydraulic conductivity and aquaporin gene- expression is crucial to the plant shoot rise caused by rhizosphere humic acids. Plant Physiology, 2015, 169, pp.00596.2015.	2.3	72
52	Comparison of a sub-harmonic and a fourth-harmonic mixer working at 440 GHz. , 2014, , .		3
53	Experimental analysis of different measurement techniques for characterization of millimeterµwave mixers. Microwave and Optical Technology Letters, 2014, 56, 1441-1447.	0.9	11
54	Magnetic dipole super-resonances and their impact on mechanical forces at optical frequencies. Optics Express, 2014, 22, 8640.	1.7	15

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55	Use of low loss substrate for developing sub-millimeter-wave mixers. , 2014, , .		3
56	Full W-Band microstrip-to-waveguide inline transition. , 2014, , .		7
57	Optimization of a Pin Surface as a Solution to Suppress Cavity Modes in a Packaged W-Band Microstrip Receiver. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 975-982.	1.4	7
58	Upper Bounds on Scattering Processes and Metamaterial-Inspired Structures That Reach Them. IEEE Transactions on Antennas and Propagation, 2014, 62, 6344-6353.	3.1	20
59	Dual band sub-mm and IR detector based on square Fresnel zone plate lens. , 2014, , .		2
60	Huygens source nanoparticle lasers and their applications. , 2014, , .		0
61	Optical trapping in the presence of higher order mode sources and interactions. Journal of Optics (United Kingdom), 2014, 16, 114024.	1.0	3
62	Analysis of square Fresnel Zone Plate Lens for dual band detectors. Journal of Infrared, Millimeter, and Terahertz Waves, 2014, 35, 525-535.	1.2	7
63	Induction Theorem Analysis of Resonant Nanoparticles: Design of a Huygens Source Nanoparticle Laser. Physical Review Applied, 2014, 1, .	1.5	42
64	Least Upper Bounds of the Powers Extracted and Scattered by Bi-anisotropic Particles. IEEE Transactions on Antennas and Propagation, 2014, 62, 4726-4735.	3.1	18
65	Properties of the Input Impedance of a THz Dipole Antenna on Top of a Woodpile Structure. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 731-739.	2.0	0
66	Subharmonic Mixer Based on EBG Technology. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 838-845.	2.0	4
67	Design and Test of a 0.5 THz Dipole Antenna With Integrated Schottky Diode Detector on a High Dielectric Constant Ceramic Electromagnetic Bandgap Substrate. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 584-593.	2.0	12
68	Dual band EBG superstrate antenna for TT&C satellite applications in C-band. , 2013, , .		1
69	High dielectric constant EBG technology to avoid gratings lobes and scan blindness in array configurations. Journal of Electromagnetic Waves and Applications, 2013, 27, 2341-2354.	1.0	1
70	Experimental Explosive Characterization for Counterterrorist Investigation. Journal of Infrared, Millimeter, and Terahertz Waves, 2013, 34, 468-479.	1.2	7
71	Broadband Radar Cross-Section Reduction Using AMC Technology. IEEE Transactions on Antennas and Propagation, 2013, 61, 6136-6143.	3.1	319
72	EBG superstrate based antennas for space applications. , 2013, , .		0

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73	Compact and weightlight electromagnetic band gap superstrate antenna for C&band TT&C applications. Microwave and Optical Technology Letters, 2013, 55, 1457-1461.	0.9	0
74	Millimeter-wave mixer measurement: Comparison of different methods. , 2013, , .		1
75	EBG antenna technology for different applications. , 2013, , .		1
76	A Multipolar Analysis of Near-Field Absorption and Scattering Processes. IEEE Transactions on Antennas and Propagation, 2013, 61, 5184-5199.	3.1	18
77	Electromagnetic force density in electrically and magnetically polarizable media. Physical Review A, 2013, 88, .	1.0	20
78	Near-field electromagnetic trapping through curl-spin forces. Physical Review A, 2013, 87, .	1.0	19
79	CIRCUIT AND MULTIPOLAR APPROACHES TO INVESTIGATE THE BALANCE OF POWERS IN 2D SCATTERING PROBLEMS. Progress in Electromagnetics Research, 2013, 142, 799-823.	1.6	2
80	Experimental study of the antenna influence in RTLS based-on RFID. , 2012, , .		2
81	Theory of ferromagnetic wires resonating in the proximity of a ground plane: Application to artificial impedance surfaces. Journal of Applied Physics, 2012, 111, 064911.	1.1	0
82	Multifrequency Radiator With Spatial Diversity Based on Metasurfaces. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 519-522.	2.4	7
83	Design and characterization of W-band components in planar technology. , 2012, , .		2
84	All-dielectric EBG horn antennas for submillimeter wavelength range. , 2012, , .		0
85	Characterization of ferromagnetic wires for self-sensing materials. , 2012, , .		0
86	Reconfigurable Artificial Surfaces Based on Impedance Loaded Wires Close to a Ground Plane. IEEE Transactions on Antennas and Propagation, 2012, 60, 1921-1930.	3.1	11
87	Fe-Rich Ferromagnetic Wires for Mechanical-Stress Self-Sensing Materials. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2752-2759.	2.9	2
88	Design of an EBG Compact Low-Mass Antenna in C-band with dual circular polarisation. , 2012, , .		1
89	Artificial impedance surfaces based on ferromagnetic wires. , 2012, , .		0
90	Multi-Functional Antennas Based on Meta-Surfaces. IEEE Transactions on Antennas and Propagation, 2012, 60, 3020-3024.	3.1	16

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91	Evanescently Fed Electromagnetic Band-Gap Horn Antennas and Arrays. IEEE Transactions on Antennas and Propagation, 2012, 60, 2635-2644.	3.1	7
92	A Comprehensive Analysis of the Absorption Spectrum of Conducting Ferromagnetic Wires. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2055-2065.	2.9	5
93	Development of a sub-harmonic mixer working at 220 GHz. , 2011, , .		8
94	A broadband radiometer configuration at 94GHz in planar technology. , 2011, , .		4
95	Multi-frequency antenna systems based on meta-surfaces. , 2011, , .		0
96	THz imaging system for industrial quality control. , 2011, , .		5
97	On the effective permittivity of arrays of ferromagnetic wires. Journal of Applied Physics, 2011, 110, 104902.	1.1	12
98	SURFACE WAVES OF FINITE SIZE ELECTROMAGNETIC BAND GAP WOODPILE STRUCTURES. Progress in Electromagnetics Research B, 2011, 28, 19-34.	0.7	17
99	SYMMETRICAL PYRAMIDAL HORN ANTENNAS BASED ON EBG STRUCTURES. Progress in Electromagnetics Research B, 2011, 29, 1-22.	0.7	9
100	Electromagnetic response and homogenization of grids of ferromagnetic microwires. Journal of Applied Physics, 2011, 110, .	1.1	31
101	Theoretical Modeling and Experimental Verification of the Scattering From a Ferromagnetic Microwire. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 517-526.	2.9	20
102	Active THz imaging system to measure water content evolution in leaves. , 2011, , .		3
103	Explosives characterization in terahertz range. Proceedings of SPIE, 2011, , .	0.8	2
104	All-dielectric woodpile horn antennas. , 2011, , .		0
105	Design and characterisation of a high efficiency ceramic EBG patch antenna. IET Microwaves, Antennas and Propagation, 2010, 4, 1056.	0.7	7
106	Decoupling of Multifrequency Dipole Antenna Arrays for Microwave Imaging Applications. International Journal of Antennas and Propagation, 2010, 2010, 1-8.	0.7	14
107	Active THz inspection of water content in plants. Proceedings of SPIE, 2010, , .	0.8	2
108	Electromagnetic-Bandgap Waveguide for the Millimeter Range. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 1734-1741.	2.9	27

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109	Frequency selective transmission scheme for ebg horn antennas. , 2010, , .		0
110	Design of an antenna array for a passive mm-wave imager. , 2010, , .		1
111	Coupling reduction in a 2 high dielectric constant EBG patch array. , 2010, , .		0
112	Magnetotunable left-handed FeSiB ferromagnetic microwires. Optics Letters, 2010, 35, 2161.	1.7	22
113	Highly-directive aperture-coupled microstrip patch antenna based on planar meta-surface. , 2010, , .		0
114	Design of millimeter wave heterodyne receivers based on metamaterial technology. , 2010, , .		0
115	Design of a dual-frequency highly-directive planar antenna with meta-surfaces. , 2010, , .		0
116	Multiband EBG navigation antenna. , 2009, , .		4
117	Mm-wave stand-off screening and detection. , 2009, , .		1
118	Suicide bomber detection. , 2009, , .		3
119	Resonance frequencies of cavities in three-dimensional electromagnetic band gap structures. Journal of Applied Physics, 2009, 106, 014901.	1.1	10
120	Coupling Reduction Between Dipole Antenna Elements by Using a Planar Meta-Surface. IEEE Transactions on Antennas and Propagation, 2009, 57, 383-394.	3.1	53
121	EBG Superstrate Array Configuration for the WAAS Space Segment. IEEE Transactions on Antennas and Propagation, 2009, 57, 81-93.	3.1	32
122	Sub-Millimeter-Wave Imaging Array at 500 GHz Based on 3-D Electromagnetic-Bandgap Material. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 2556-2565.	2.9	16
123	Resonant Meta-Surface Superstrate for Single and Multifrequency Dipole Antenna Arrays. IEEE Transactions on Antennas and Propagation, 2008, 56, 951-960.	3.1	40
124	Near-field measurement of a planar meta-surface illuminated by dipole antennas. , 2008, , .		2
125	Enhanced directed emission from metamaterial based radiation source. Applied Physics Letters, 2008, 92, 204103.	1.5	10
126	Low Profile Multi-Frequency Dipole Antenna Array Based on Planar Meta-Surfaces. , 2007, , .		1

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127	Design and characterisation of an EBG imaging array at sub-millimetre wave frequencies. , 2007, , .		1
128	Power transmission enhancement by means of planar meta-surfaces. Journal of Optics, 2007, 9, S308-S314.	1.5	12
129	RCS reduction in a chessboard like structure using AMC cells. , 2007, , .		14
130	Meta-surfaces for antenna applications. , 2007, , .		1
131	Recent satellite antenna developments at MDA. , 2007, , .		5
132	Thin AMC Structure for Radar Cross-Section Reduction. IEEE Transactions on Antennas and Propagation, 2007, 55, 3630-3638.	3.1	548
133	Modifications of the woodpile structure for the improvement of its performance as substrate for dipole antennas. IET Microwaves, Antennas and Propagation, 2007, 1, 226.	0.7	6
134	Highly efficient dipole antenna with planar meta-surface. Electronics Letters, 2007, 43, 850.	0.5	20
135	A Metamaterial T-Junction Power Divider. IEEE Microwave and Wireless Components Letters, 2007, 17, 172-174.	2.0	27
136	Modelling and Analysis of Composite Antenna Superstrates Based on Grids of Dipoles and Wires. , 2007, , .		2
137	Reflection Properties of a planar structure combining AMC and PEC cells. , 2007, , .		2
138	A 250 GHz Subharmonic Mixer Design Using EBG Technology. IEEE Transactions on Antennas and Propagation, 2007, 55, 2974-2982.	3.1	14
139	Combination of AMC and PEC cells for RCS applications. , 2007, , .		4
140	EBG navigation antenna for geosynchronous satellite applications. , 2007, , .		1
141	Manufacturing Tolerance Analysis, Fabrication, and Characterization of 3-D Submillimeter-Wave Electromagnetic-Bandgap Crystals. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 672-681.	2.9	27
142	Measurements of the radiation performance of a planar meta-surface based on dipoles and wires. , 2007, , .		1
143	Experimental verification of the reduction of coupling between dipole antennas by using a woodpile substrate. IEEE Transactions on Antennas and Propagation, 2006, 54, 2105-2112.	3.1	13
144	Metamaterials technology for sub-mm wave imaging. , 2006, , .		0

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145	Recent advances on metamaterials with applications in terminal and high gain antennas. , 2005, 5955, 116.		0
146	Dipole antenna performance using a woodpile substrate at microwave frequencies. , 2005, , .		0
147	Electromagnetic crystal technology for waveguides and bends at microwave frequencies. Electronics Letters, 2005, 41, 421.	0.5	6
148	Transmission enhancement between rectangular waveguides by means of left-handed media. Electronics Letters, 2005, 41, 725.	0.5	5
149	Optimization of a 500 GHz Receiver Using EBG Technology. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2005, 1, 42-45.	0.4	3
150	High-K EBG substrates for phase-array patch-antenna configurations. Microwave and Optical Technology Letters, 2004, 43, 527-532.	0.9	5
151	Measurement of the dielectric constant and loss tangent of high dielectric-constant materials at terahertz frequencies. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 1062-1066.	2.9	171
152	Comparative analysis of mode reflection and transmission in presence of a cutoff cross section of nonuniform waveguide by using the cross section and the mode-matching and generalized scattering-matrix methods. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 637-645.	2.9	5
153	Radiation properties of terahertz dipole antenna mounted on photonic crystal. Electronics Letters, 2001, 37, 613.	0.5	44
154	A 250 GHz sub-harmonic Mixer design implemented in EBG Technology. , 0, , .		0
155	Radiation performances of a dipole array configuration inserted in a left-handed media. , 0, , .		5
156	Enhancement of the Power Radiated by a Dipole Antenna at Boresight by Means of a Left Handed Superstrate. , 0, , .		2