

Giovanni Toso

List of Publications by Year in descending order

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110
papers

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331259

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docs citations

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times ranked

1261
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase-Only Synthesis for Large Planar Arrays via Zernike Polynomials and Invasive Weed Optimization. IEEE Transactions on Antennas and Propagation, 2022, 70, 1954-1964.	3.1	10
2	Ka-Band Reconfigurable Reflectarrays Using Varactor Technology for Space Applications: A proposed design. IEEE Antennas and Propagation Magazine, 2022, 64, 27-38.	1.2	13
3	An Optimal Procedure for the Design of Discrete Constrained Lens Antennas with Minimized Optical Aberrations. Part I: Two-Dimensional Architectures. Electronics (Switzerland), 2022, 11, 493.	1.8	2
4	An Optimal Procedure for the Design of Discrete Constrained Lens Antennas with Minimized Optical Aberrations. Part II: Three-Dimensional Multifocal Architectures. Electronics (Switzerland), 2022, 11, 503.	1.8	2
5	An Optimal Procedure for the Design of Discrete Constrained Lens Antennas with Minimized Optical Aberrations. Part III: Three-Dimensional Architectures with an Extended Field of View. Electronics (Switzerland), 2022, 11, 687.	1.8	1
6	Antenna Design for Overlapped Array Fed Reflector OLAF SAR Instrument. , 2022, , .		0
7	Architecture of the Overlapped Subarray Fed Reflector Antenna SAR System. , 2022, , .		0
8	Vertically Printable Evanescent Mode Filters. IEEE Microwave and Wireless Components Letters, 2022, 32, 1299-1302.	2.0	7
9	Transmit—Receive Parabolic Reflectarray to Generate Two Beams per Feed for Multispot Satellite Antennas in <i>Ka</i>-Band. IEEE Transactions on Antennas and Propagation, 2021, 69, 2673-2685.	3.1	13
10	A Dielectric Dome Antenna With Reduced Profile and Wide Scanning Capability. IEEE Transactions on Antennas and Propagation, 2021, 69, 747-759.	3.1	23
11	Hybrid Analog-Digital SAR Instrument With Reflector Antenna and Overlapped Subarray Feed for Earth Observation. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 2110-2114.	2.4	7
12	A Dual-Band Circularly Polarized Patch Array Antenna for Phase-Only Beam Shaping with Element Rotation. Electronics (Switzerland), 2021, 10, 643.	1.8	3
13	Parabolic Reflectarray Antenna to Generate Multiple Beams in Dual-Frequency and Dual-Circular Polarization. , 2021, , .		1
14	Multi-channel Feedarray Reflector Antenna Based Radar Concept for HRWS SAR Imaging. , 2021, , .		6
15	Corrections to “Design of Overlapped Sub-Arrays Based on Aperture Reactive Loading“. IEEE Transactions on Antennas and Propagation, 2021, 69, 3629-3629.	3.1	0
16	A comparison between basis functions for the efficient invasive weed optimization—based optimization of phase—only linear array patterns. Microwave and Optical Technology Letters, 2021, 63, 1526-1531.	0.9	3
17	Parametric Analysis of Linear Periodic Arrays Generating Flat-Top Beams. Electronics (Switzerland), 2021, 10, 2452.	1.8	4
18	A Ku-Band Magnified Active Tx/Rx Multibeam Antenna Based on a Discrete Constrained Lens. Electronics (Switzerland), 2021, 10, 2824.	1.8	5

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19	Doubly Curved Reflectarray for Dual-Band Multiple Spot Beam Communication Satellites. IEEE Transactions on Antennas and Propagation, 2020, 68, 2087-2096.	3.1	17
20	Design of Wideband Wide-Scanning Dual-Polarized Phased Array Covering Simultaneously Both the Ku- and the Ka-Satcom Bands. , 2020, , .		11
21	High-Gain Flat-Top Antenna Sub-Arrays for Planar Arrays with Limited Field of View. , 2020, , .		0
22	High-Gain Planar Array of Reactively Loaded Antennas for Limited Scan Range Applications. Electronics (Switzerland), 2020, 9, 1376.	1.8	3
23	Rotman Lenses with Ridged Waveguides in Q-Band. , 2020, , .		4
24	Bifocal Dual-Reflectarray Antenna to Generate a Complete Multiple Spot Beam Coverage for Satellite Communications in Ka-Band. Electronics (Switzerland), 2020, 9, 961.	1.8	2
25	Design of Overlapped Subarrays Based on Aperture Reactive Loading. IEEE Transactions on Antennas and Propagation, 2020, 68, 5322-5333.	3.1	8
26	Development of Enabling Technologies for Ku-Band Airborne SATCOM Phased-Arrays. Electronics (Switzerland), 2020, 9, 488.	1.8	9
27	Deterministic Constrained Synthesis Technique for Conformal Aperiodic Linear Antenna Arrays”Part II: Applications. IEEE Transactions on Antennas and Propagation, 2019, 67, 5962-5973.	3.1	10
28	Deterministic Constrained Synthesis Technique for Conformal Aperiodic Linear Antenna Arrays”Part I: Theory. IEEE Transactions on Antennas and Propagation, 2019, 67, 5951-5961.	3.1	14
29	Evanescent-Mode Ridge-Waveguide Radiating Filters for Space Applications. IEEE Transactions on Antennas and Propagation, 2019, 67, 6286-6297.	3.1	10
30	Advanced Multibeam Antenna Configurations Based on Reflectarrays: Providing multispot coverage with a smaller number of apertures for satellite communications in the K and Ka bands. IEEE Antennas and Propagation Magazine, 2019, 61, 77-86.	1.2	22
31	A Ka-Band Spaceborne Synthetic Aperture Radar Instrument: A modular sparse array antenna design. IEEE Antennas and Propagation Magazine, 2019, 61, 97-104.	1.2	11
32	A Ka-Band Active Aperiodic Constrained Lens Antenna for Multibeam Applications: Active discrete lens antennas are promising alternative solutions for multibeam coverage using a single aperture. IEEE Antennas and Propagation Magazine, 2019, 61, 60-68.	1.2	8
33	Flat Reflectarray That Generates Adjacent Beams by Discriminating in Dual Circular Polarization. IEEE Transactions on Antennas and Propagation, 2019, 67, 3733-3742.	3.1	35
34	Active Multibeam Antennas based on Rotman Lens Arrays. , 2019, , .		2
35	Reconfigurable Antenna Based on Liquid Crystals for Continuous Beam Scanning with a Single Control. , 2019, , .		10
36	Reflectarray to Generate Four Adjacent Beams per Feed for Multispot Satellite Antennas. IEEE Transactions on Antennas and Propagation, 2019, 67, 1265-1269.	3.1	20

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37	Dual-polarization reflectarray in Ku-band based on two layers of dipole arrays for a transmit–receive satellite antenna with South American coverage. International Journal of Microwave and Wireless Technologies, 2018, 10, 149-159.	1.5	22
38	Design of a Bifocal Dual Reflectarray System with Parabolic Main Surface for a Multifed Space Antenna. , 2018, , .		1
39	A Multibeam Parabolic Reflectarray for Onboard Tx and Rx Satellite Antennas At the Ka Band. , 2018, , .		2
40	UNEQUAL POLYOMINO LAYERS FOR REDUCED SLL ARRAYS WITH SCANNING ABILITY. Progress in Electromagnetics Research, 2018, 162, 31-38.	1.6	6
41	Phase-Gradient Meta-Dome for Increasing Grating-Lobe-Free Scan Range in Phased Arrays. IEEE Transactions on Antennas and Propagation, 2018, 66, 3973-3982.	3.1	41
42	High-performance curved contoured beam reflectarrays with reusable surface for multiple coverages. , 2017, , .		3
43	Multibeam antennas for very high throughput satellites in Europe: Technologies and trends. , 2017, , .		41
44	Optimized Periodic MoM for the Analysis and Design of Dual Polarization Multilayered Reflectarray Antennas Made of Dipoles. IEEE Transactions on Antennas and Propagation, 2017, 65, 3623-3637.	3.1	17
45	Application of bifocal concept to dual reflectarray configurations for multi-beam satellite antennas in Ka-band. , 2017, , .		6
46	Design of aperiodic frequency selective surfaces for compact quasi-optical networks. , 2017, , .		2
47	Deterministic synthesis of conformal linear aperiodic antenna arrays. , 2017, , .		3
48	FAST, PHASE-ONLY SYNTHESIS OF APERIODIC REFLECTARRAYS USING NUFFT AND CUDA. Progress in Electromagnetics Research, 2016, 156, 83-103.	1.6	23
49	Multibeam antennas for global satellite coverage: theory and design. IET Microwaves, Antennas and Propagation, 2016, 10, 1475-1484.	0.7	12
50	Parametric analysis of flat top beam patterns generated by linear periodic arrays. , 2016, , .		2
51	A software tool for satellite advanced multibeam aperiodic array synthesis. , 2016, , .		0
52	Cross-polar reduction in reflectarray antennas by means of element rotation. , 2016, , .		10
53	Characterization of a Dual-Polarized Connected-Dipole Array for Ku-Band Mobile Terminals. IEEE Transactions on Antennas and Propagation, 2016, 64, 591-598.	3.1	37
54	A Transportable Reflectarray Antenna for Satellite Ku-band Emergency Communications. IEEE Transactions on Antennas and Propagation, 2015, 63, 1393-1407.	3.1	55

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55	Reflectarray Antennas for Dual Polarization and Broadband Telecom Satellite Applications. IEEE Transactions on Antennas and Propagation, 2015, 63, 1234-1246.	3.1	122
56	An Imaging Reflector System with Reduced Scanning Aberrations. IEEE Transactions on Antennas and Propagation, 2015, 63, 1342-1350.	3.1	8
57	A Dual Frequency Ka-Band Printed Fresnel Reflector for Ground Terminal Applications. IEEE Transactions on Antennas and Propagation, 2015, 63, 4352-4366.	3.1	20
58	ON THE SCANNING PROPERTIES OF IMAGING ANTENNAS BASED ON DUAL CONFOCAL PARABOLOIDAL REFLECTORS. Progress in Electromagnetics Research M, 2014, 37, 95-107.	0.5	8
59	Speeding up aperiodic reflectarray antenna analysis by CUDA dynamic parallelism. , 2014, , .		0
60	On the deterministic synthesis of aperiodic ring antenna arrays. , 2014, , .		4
61	A Stochastic Study of Large Arrays Related to the Number of Electrically Large Aperture Radiators. IEEE Transactions on Antennas and Propagation, 2014, 62, 3520-3533.	3.1	9
62	A novel Lossless BFN for linear arrays based on overlapped sub-arrays. , 2014, , .		1
63	Array Antennas With Jointly Optimized Elements Positions and Dimensions Part I: Linear Arrays. IEEE Transactions on Antennas and Propagation, 2014, 62, 1619-1626.	3.1	29
64	Sparse array antennas with optimized elements positions and dimensions. , 2014, , .		2
65	Tx/Rx multibeam satellite antenna array design assesment on a single aperture. , 2014, , .		0
66	A Lossless Beam-Forming Network for Linear Arrays Based on Overlapped Sub-Arrays. IEEE Transactions on Antennas and Propagation, 2014, 62, 1769-1778.	3.1	46
67	The Generalized Direct Optimization Technique for Printed Reflectarrays. IEEE Transactions on Antennas and Propagation, 2014, 62, 1690-1700.	3.1	42
68	Multibeam antennas based on phased arrays: An overview on recent ESA developments. , 2014, , .		23
69	Array Antennas With Jointly Optimized Elements Positions and Dimensions Part II: Planar Circular Arrays. IEEE Transactions on Antennas and Propagation, 2014, 62, 1627-1639.	3.1	57
70	Design and Experimental Validation of Liquid Crystal-Based Reconfigurable Reflectarray Elements With Improved Bandwidth in F-Band. IEEE Transactions on Antennas and Propagation, 2013, 61, 1704-1713.	3.1	116
71	Optimization of the Array Element Layout for a Rotating Imaging Interferometer. IEEE Transactions on Antennas and Propagation, 2013, 61, 5057-5067.	3.1	9
72	Sparse Arrays for SatCom Applications. , 2013, , .		0

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73	PHASE-ONLY SYNTHESIS OF FLAT APERIODIC REFLECTARRAYS. Progress in Electromagnetics Research, 2013, 133, 53-89.	1.6	27
74	A HYBRID DETERMINISTIC/METAHEURISTIC SYNTHESIS TECHNIQUE FOR NON-UNIFORMLY SPACED LINEAR PRINTED ANTENNA ARRAYS. Progress in Electromagnetics Research, 2013, 142, 107-121.	1.6	14
75	Design and analysis of printed reflectarrays with irregularly positioned array elements. , 2012, , .		2
76	Spectral synthesis of piecewise linear polyphase codes for good aperiodic autocorrelation performance. , 2012, , .		0
77	A ku-band dual-polarization connected array of dipoles with wide-scan capability for in-flight entertainment. , 2012, , .		0
78	Circular sparse arrays with quantized weights. , 2012, , .		0
79	Aperiodic Arrays for Spaceborne SAR Applications. IEEE Transactions on Antennas and Propagation, 2012, 60, 2285-2294.	3.1	40
80	Design of dual-polarized contoured beam reflectarrays with cross-polar and sidelobe suppression. , 2012, , .		0
81	A 1.3 m faceted reflectarray in Ku band. , 2012, , .		4
82	On the reduction of phase-aberrations in three-dimensional Rotman lens design. , 2012, , .		1
83	Electrical characterisation of liquid crystals at millimetre wavelengths using frequency selective surfaces. Electronics Letters, 2012, 48, 611.	0.5	36
84	New Piecewise Linear Polyphase Sequences Based on a Spectral Domain Synthesis. IEEE Transactions on Information Theory, 2012, 58, 4890-4898.	1.5	6
85	A Transmit-Receive Reflectarray Antenna for Direct Broadcast Satellite Applications. IEEE Transactions on Antennas and Propagation, 2011, 59, 3255-3264.	3.1	121
86	Analysis of a dual-reflectarray antenna. IET Microwaves, Antennas and Propagation, 2011, 5, 1636.	0.7	35
87	Synthesis of circular and elliptical sparse arrays. Electronics Letters, 2011, 47, 304.	0.5	27
88	A new class of equi-amplitude omnidirectional linear arrays. , 2010, , .		1
89	Deterministic Synthesis of Uniform Amplitude Sparse Arrays via New Density Taper Techniques. IEEE Transactions on Antennas and Propagation, 2010, 58, 1949-1958.	3.1	144
90	A novel phase-only excitation law for omnidirectional arrays. , 2010, , .		1

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91	A combined amplitude-density synthesis approach for the design of linear aperiodic arrays. , 2010, , .		1
92	Design of dual-reflectarray antenna for beam scanning. , 2010, , .		3
93	Sunflower Array Antenna with Adjustable Density Taper. International Journal of Antennas and Propagation, 2009, 2009, 1-10.	0.7	90
94	Ku Band Hemispherical Fully Electronic Antenna for Aircraft in Flight Entertainment. International Journal of Antennas and Propagation, 2009, 2009, 1-7.	0.7	12
95	Scanning Performances of Wideband Connected Arrays in the Presence of a Backing Reflector. IEEE Transactions on Antennas and Propagation, 2009, 57, 3092-3102.	3.1	87
96	Projection based methodology for designing non-periodic, planar arrays. , 2008, , .		6
97	High-gain wideband low-profile antenna. Microwave and Optical Technology Letters, 2006, 48, 2615-2619.	0.9	13
98	Reflectarrays antennas for SAR missions. , 2005, , .		4
99	Fast Gaussian beam technique for the analysis of composite horn-reflector antenna systems. Microwave and Optical Technology Letters, 2004, 42, 95-100.	0.9	3
100	Analysis of the S-band communication link between the automated transfer vehicle and the data relay satellites in the presence of the space station. IEEE Antennas and Propagation Magazine, 2002, 44, 12-23.	1.2	6
101	Scattering from finite periodic structures: A comparison between measured and UAPO results. Microwave and Optical Technology Letters, 2002, 34, 340-341.	0.9	0
102	<title>Sea surface as seen at L-band microwaves: modeling and applications</title>. , 2002, , .		0
103	A comparison between two hybrid techniques for the scattering from finite frequency-selective surfaces. Microwave and Optical Technology Letters, 2001, 31, 248-252.	0.9	6
104	Finite-element boundary-integral analysis of electromagnetic scattering by a buried dielectric object. Microwave and Optical Technology Letters, 2000, 24, 422-426.	0.9	3
105	Scattering from dihedral corner reflectors with sinusoidally deformed faces. Microwave and Optical Technology Letters, 2000, 25, 246-251.	0.9	2
106	Backscattering By a Dihedral Corner Reflector With Surface Deformations. Journal of Electromagnetic Waves and Applications, 2000, 14, 833-851.	1.0	1
107	Po Analysis of the Scattering From Polygonal Flat-Plate Structures With Dielectric Inclusions. Journal of Electromagnetic Waves and Applications, 2000, 14, 693-711.	1.0	4
108	An exact line integral representation of the physical optics field scattered from a penetrable planar structure illuminated by a plane wave. Microwave and Optical Technology Letters, 1999, 20, 13-17.	0.9	5

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109	Electromagnetic scattering from bounded or infinite subsurface bodies. Radio Science, 1997, 32, 1347-1359.	0.8	28
110	Parabolic reflectarray antenna to generate multiple beams for geostationary high throughput satellites in Ka-band. International Journal of Microwave and Wireless Technologies, 0, , 1-10.	1.5	0