Krzysztof Wincza

List of Publications by Year in descending order

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133	1,412	20	31
papers	citations	h-index	g-index
133	133	133	871
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Planar single and dual-resonant microwave biosensors for label-free bacteria detection. Sensors and Actuators B: Chemical, 2022, 351, 130899.	7.8	9
2	Extraction of Parallel-Coupled and End-Coupled TEM Resonator Networks from a Coupling Matrix in the Design of Coupled-Resonator Filters. Electronics (Switzerland), 2022, 11, 1250.	3.1	1
3	Four-Node Antenna Feeding Network for Interfacing With Differential Front-End Electronics. IEEE Access, 2021, 9, 103728-103736.	4.2	2
4	Broadband Equal-Split Directional Couplers Composed of Cascade- and Tandem-Connected Coupled-Line Sections Having Unequal Lengths. IEEE Access, 2021, 9, 117434-117443.	4.2	2
5	A 24 GHz Microwave Sensor With Built-in Calibration Capability Designed in MMIC Technology. IEEE Access, 2021, 9, 31513-31524.	4.2	7
6	Multisection Ultra-Broadband Directional Coupler Designed in MMIC Technology. IEEE Access, 2021, 9, 33478-33486.	4.2	7
7	Reduced-Length Tandem Directional Couplers Composed of Coupled-Line Sections With Fixed Coupling Coefficient. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 1625-1634.	4.6	5
8	Detection of methanol contamination in ethyl alcohol employing a purpose-designed high-sensitivity microwave sensor. Measurement: Journal of the International Measurement Confederation, 2021, 174, 108993.	5.0	11
9	Direct Broadband Dielectric Spectroscopy of Liquid Chemicals Using Microwave-Fluidic Two-Wire Transmission Line Sensor. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2569-2578.	4.6	14
10	Octave-Band Four-Beam Antenna Arrays with Stable Beam Direction Fed by Broadband 4 × 4 Butler Matrix. Electronics (Switzerland), 2021, 10, 2712.	3.1	5
11	Microwave-based Nitrogen Dioxide Gas Sensor For Automotive Applications. , 2021, , .		4
12	Broadband feeding networks based on directional filters for two-beam antenna arrays. Journal of Electromagnetic Waves and Applications, 2020, 34, 1300-1307.	1.6	6
13	Monolithic Miniaturized Differentially-Fed Branch-Line Directional Coupler in GaAs Monolithic Technology. Electronics (Switzerland), 2020, 9, 446.	3.1	3
14	Chebyshev-Response Branch-Line Couplers with Enhanced Bandwidth and Arbitrary Coupling Level. Electronics (Switzerland), 2020, 9, 1828.	3.1	4
15	Multisection tandem couplers with coupledâ€line sections having unequal lengths. Microwave and Optical Technology Letters, 2020, 62, 2488-2492.	1.4	2
16	Broadband Microwave Microfluidic Coupled-Line Sensor With 3-D-Printed Channel for Industrial Applications. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 2808-2822.	4.6	20
17	Modal phase velocity compensation in multilayer differentially fed directional couplers. Microwave and Optical Technology Letters, 2020, 62, 1882-1887.	1.4	1
18	Differential Bi-Level Microstrip Directional Coupler with Equalized Coupling Coefficients for Directivity Improvement. Electronics (Switzerland), 2020, 9, 547.	3.1	1

#	Article	IF	Citations
19	Broadband Differentially-Fed Substrate-Integrated Directional Coupler. , 2019, , .		1
20	Differentially-fed directional filter with differential edge-coupled-line sections. , 2019, , .		0
21	Selectivity improved directional filters using cross-coupling introduced transmission zeros. Journal of Electromagnetic Waves and Applications, 2019, 33, 2126-2141.	1.6	0
22	Design of 3-dB Differentially-Fed Tandem Directional Couplers. , 2019, , .		2
23	Application of 3-D Printing Technology for the Realization of High-Performance Directional Couplers in Suspended Stripline Technique. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1652-1658.	2.5	10
24	Broadband Differentially-Fed Directional Coupler Composed of Coupled and Uncoupled Sections. , 2019, , .		2
25	Highâ€performance differentially fed coupledâ€line directional couplers realised in inhomogeneous medium. IET Microwaves, Antennas and Propagation, 2019, 13, 2005-2012.	1.4	5
26	Application of Aerosol Jet 3-D Printing With Conductive and Nonconductive Inks for Manufacturing mm-Wave Circuits. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 586-595.	2.5	14
27	Broadband matrix-type feeding networks for two-beam antennas with constant beamwidth and efficient aperture utilization. Journal of Electromagnetic Waves and Applications, 2019, 33, 236-248.	1.6	6
28	Realization of High-Performance Broadband Quadrature Directional Couplers in UMS PH25 Technology. Electronics (Switzerland), 2019, 8, 1520.	3.1	3
29	Low-Loss Directional Filters Based on Differential Band-Reject Filters With Improved Isolation Using Phase Inverter. IEEE Microwave and Wireless Components Letters, 2018, 28, 314-316.	3.2	7
30	Wideband Three-Section Symmetrical Coupled-Line Directional Coupler Operating in Differential Mode. IEEE Microwave and Wireless Components Letters, 2018, 28, 488-490.	3.2	14
31	Impedance Transforming Tandem Couplers With Increased Bandwidth and Transformation Ratio. IEEE Microwave and Wireless Components Letters, 2018, 28, 299-301.	3.2	3
32	Composite right-/left-handed leaky-wave antenna utilizing coupled-line sections. Journal of Electromagnetic Waves and Applications, 2018, 32, 768-780.	1.6	3
33	Impedance transforming rat-race couplers with modified Lange section. Journal of Electromagnetic Waves and Applications, 2018, 32, 972-983.	1.6	3
34	Low-Cost Microwave Vector System for Liquid Properties Monitoring. IEEE Transactions on Industrial Electronics, 2018, 65, 1665-1674.	7.9	51
35	Dual-Circular Polarized Antenna Lattice with Odd Number of Radiating Elements and Integrated Feeding Network. , 2018, , .		0
36	Realization of Compact Patch Antennas on Magneto-Dielectric Substrate Using 3D Printing Technology with Iron-Enhanced PLA Filament. , 2018, , .		5

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37	Experimental Verification of 3D Printed Low-Conductivity Graphene-Enhanced PLA Absorbers for Back Lobe Suppression in Aperture-Coupled Antennas. , 2018, , .		7
38	Effectiveness of Sensors Contact Metallization (Ti, Au, and Ru) and Biofunctionalization for Escherichia coli Detection. Sensors, 2018, 18, 2912.	3.8	9
39	Wideband six-port reflectometer. , 2018, , .		1
40	Frequency Multiplexer With Improved Selectivity Using Asymmetric Response Directional Filters. IEEE Microwave and Wireless Components Letters, 2018, 28, 491-493.	3.2	5
41	Differentially Fed Directional Couplers With Coupled-Conductors of Unequal Widths. IEEE Microwave and Wireless Components Letters, 2018, 28, 759-761.	3.2	16
42	Liquids Permittivity Measurement Using Two-Wire Transmission Line Sensor. IEEE Sensors Journal, 2018, 18, 7458-7466.	4.7	17
43	Application of Additive Manufacturing Technologies for Realization of Multilayer Microstrip Directional Filter. , 2018, , .		5
44	Suspended Microstrip Low-Pass Filter Realized Using FDM Type 3D Printing with Conductive Copper-Based Filament. , 2018, , .		5
45	Impedance transforming directional couplers with increased achievable transformation ratio. International Journal of Microwave and Wireless Technologies, 2017, 9, 509-513.	1.9	1
46	Microwave Sensors for Dielectric Sample Measurement Based on Coupled-Line Section. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1615-1631.	4.6	36
47	Ultra-Wideband Dual-Line Multiprobe Reflectometer. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1324-1333.	4.6	10
48	Planar composite right/left-handed leaky-wave antenna featuring dual beam. , 2017, , .		2
49	Approach to the design of wideband antenna arrays with reduced coupling between elements. , 2017, , .		2
50	Single-layer four-beam microstrip antenna array. , 2017, , .		5
51	Series-fed antenna lattice featuring dual-circular polarization with integrated feeding network. , 2017, , .		1
52	Frequency-Selective Feeding Network Based on Directional Filter for Constant-Beamwidth Scalable Antenna Arrays. IEEE Transactions on Antennas and Propagation, 2017, 65, 4346-4350.	5.1	9
53	Folded single-layer 8 $ ilde{A}$ — 8 Butler matrix. Journal of Electromagnetic Waves and Applications, 2017, 31, 1386-1398.	1.6	8
54	Broadband Multibeam Antenna Arrays Fed by Frequency-Dependent Butler Matrices. IEEE Transactions on Antennas and Propagation, 2017, 65, 4539-4547.	5.1	35

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55	Integrated two-beam antenna array featuring dual-circular polarization. , 2017, , .		2
56	Broadband Integrated <inline-formula> <tex-math notation="LaTeX">\$8 imes 8\$ </tex-math> </inline-formula> Butler Matrix Utilizing Quadrature Couplers and Schiffman Phase Shifters for Multibeam Antennas With Broadside Beam. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 2596-2604.	4.6	71
57	Octave-band aperture-stakced microstrip antenna element for wideband antenna arrays. , 2016, , .		1
58	Suspended-strip-coaxial line impedance-transforming directional coupler. , 2016, , .		0
59	Modified series-fed dual-polarized antenna lattice with improved bandwidth., 2016,,.		0
60	Polarization purity improvement of a coupled-line leaky-wave antenna., 2016,,.		0
61	Composite right/left-handed leaky-wave antenna with adjustable radiation bandwidth. Journal of Electromagnetic Waves and Applications, 2016, 30, 1054-1063.	1.6	7
62	Symmetrical seriesâ€fed dualâ€polarised microstrip antenna lattice with odd number of radiating elements. IET Microwaves, Antennas and Propagation, 2016, 10, 701-708.	1.4	4
63	Broadband Scalable Antenna Arrays With Constant Beamwidths Fed by Frequency-Selective Networks. IEEE Transactions on Antennas and Propagation, 2016, 64, 2936-2943.	5.1	15
64	Direct N-QAM multiport modulators utilizing butler matrices. , 2016, , .		5
65	Polarization purity improvement method for linear series-fed antenna arrays. , 2016, , .		2
66	Rigorous Approach for Design of Differential Coupled-Line Directional Couplers Applicable in Integrated Circuits and Substrate-Embedded Networks. Scientific Reports, 2016, 6, 25071.	3.3	13
67	Two-dimensional beamwidth broadening of microstrip antenna arrays. , 2016, , .		1
68	Linear-polarized three-beam four-element antenna array with reduced sidelobe level. , 2016, , .		1
69	Coupled-Line Sensor With Marchand Balun as RF System for Dielectric Sample Detection. IEEE Sensors Journal, 2016, 16, 88-96.	4.7	29
70	Scalable Multibeam Antenna Arrays Fed by Dual-Band Modified Butler Matrices. IEEE Transactions on Antennas and Propagation, 2016, 64, 1287-1297.	5.1	49
71	Six-Port Reflectometer Providing Enhanced Power Distribution. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-13.	4.6	33
72	Improved design of an ultra-broadband probe for multiprobe reflectometers. , 2015, , .		1

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73	Broadband ten-port reflectometer with enhanced measurement accuracy. , 2015, , .		2
74	Ultrabroadband multiprobe reflectometer. Microwave and Optical Technology Letters, 2015, 57, 1968-1971.	1.4	5
75	Pseudo-highpass filters based on semi-distributed balanced composite right/left-handed unit cells. Journal of Electromagnetic Waves and Applications, 2015, 29, 2171-2177.	1.6	2
76	Input Match and Output Balance Improvement of Marchand Balun With Connecting Line. IEEE Microwave and Wireless Components Letters, 2014, 24, 683-685.	3.2	15
77	Compact Integrated Feeding Network for Excitation of Dual-Circular Polarization in Series-Fed Antenna Lattice. IEEE Transactions on Antennas and Propagation, 2014, 62, 5876-5879.	5.1	9
78	Complex permittivity and permeability estimation by reflection measurements of open and short coaxial transmission line. Microwave and Optical Technology Letters, 2014, 56, 727-732.	1.4	12
79	Accurate broadband multiport reflectometer. Microwave and Optical Technology Letters, 2014, 56, 2884-2887.	1.4	3
80	Directional couplers with reduced coupling requirements as connection of coupledâ€line sections and leftâ€handed transmission lines. IET Microwaves, Antennas and Propagation, 2014, 8, 580-588.	1.4	14
81	Series-Fed Microstrip Antenna Lattice With Switched Polarization Utilizing Butler Matrix. IEEE Transactions on Antennas and Propagation, 2014, 62, 145-152.	5.1	26
82	Reduced-Length Two-Section Directional Couplers Designed as Coupled-Line Sections Connected With the Use of Uncoupled Lines. IEEE Microwave and Wireless Components Letters, 2014, 24, 376-378.	3.2	9
83	Broadband Measurements of \$S\$-Parameters With the Use of a Single 8 \$imes\$ 8 Butler Matrix. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 352-360.	4.6	21
84	A Broadband 3 dB Tandem Coupler Utilizing Right/Left Handed Transmission Line Sections. IEEE Microwave and Wireless Components Letters, 2014, 24, 236-238.	3.2	11
85	Switchedâ€beam antenna array with broadside beam fed by modified butler matrix for radar receiver application. Microwave and Optical Technology Letters, 2014, 56, 732-735.	1.4	12
86	Multisection Couplers With Coupled-Line Sections Having Unequal Lengths. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1461-1469.	4.6	12
87	Reduced sidelobe switched beam antenna array for driver's fatigue level Doppler sensor. , 2013, , .		0
88	Miniaturized quasiâ€lumped coupledâ€line singleâ€section directional coupler designed in multilayer LTCC technology. Microwave and Optical Technology Letters, 2013, 55, 1401-1405.	1.4	12
89	Theoretical Limits and Accuracy Improvement of Reflection-Coefficient Measurements in Six-Port Reflectometers. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2966-2974.	4.6	45
90	Theoretical limits on miniaturization of directional couplers designed as a connection of tightly coupled and uncoupled lines. Microwave and Optical Technology Letters, 2013, 55, 223-230.	1.4	14

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91	Broadband threeâ€section symmetrical directional couplers with reduced coupling coefficient requirements. Microwave and Optical Technology Letters, 2013, 55, 639-645.	1.4	5
92	Miniaturized broadband three-section symmetrical directional coupler with reduced coupling coefficient requirements. , 2013, , .		1
93	Series-Fed Microstrip Antenna Array With Inclined-Slot Couplers as Three-Way Power Dividers. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 62-64.	4.0	23
94	Broadband Measurements of \$S\$-Parameters Utilizing 4\$,imes,\$4 Butler Matrices. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1692-1699.	4.6	25
95	Nano-thin CuO films doped with Au and Pd for gas sensors applications. , 2013, , .		3
96	Design and accuracy analysis of a broadband sixâ€port reflectometer utilizing coupledâ€line directional couplers. Microwave and Optical Technology Letters, 2013, 55, 1485-1490.	1.4	12
97	Analysis of tem threeâ€section symmetrical directional couplers with tandemâ€connected center section. Microwave and Optical Technology Letters, 2013, 55, 2578-2582.	1.4	5
98	Series-fed linear antenna array with slot coupler as power divider and 180& \pm x00B0; phase shifter., 2012,,.		0
99	The gas micropreconcentrators in LTCC and MEMS technologies for breath acetone analysis. , 2012, , .		0
100	A broadband low-cost antenna array for frequency modulated continuous wave (FMCW) radars operating at 24 GHz. , 2012, , .		0
101	Miniaturized broadband 4 × 4 Butler matrix designed with the use of quasi-lumped coupled-line couplers. , 2012, , .		2
102	Miniaturized broadband multisection coupled-line wilkinson power divider designed with the use of quasi-lumped element technique. , 2012, , .		1
103	Microstrip Antenna Array With Series Feeding Network Designed With the Use of Slot-Coupled Three-Way Power Divider. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 667-670.	4.0	16
104	Broadband waveguideâ€toâ€microstrip transition with coupled tuning elements. Microwave and Optical Technology Letters, 2012, 54, 2787-2789.	1.4	1
105	Meandered coupled-line single-section directional coupler designed in multilayer LTCC technology. , 2012, , .		2
106	Ultrabroadband 8 \tilde{A} — 8 Butler matrix designed with the use of multisection directional couplers and phase correction networks. Microwave and Optical Technology Letters, 2012, 54, 1375-1380.	1.4	2
107	Broadband Rat-Race Couplers With Coupled-Line Section and Impedance Transformers. IEEE Microwave and Wireless Components Letters, 2012, 22, 22-24.	3.2	49
108	Broadband Planar Fully Integrated 8\$, imes ,\$8 Butler Matrix Using Coupled-Line Directional Couplers. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2441-2446.	4.6	42

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109	Analog coherent detection in application to high-sensitivity nonlinear junction detectors., 2011,,.		5
110	Broadband 4 × 4 Butler matrices utilizing tapered-coupled-line directional couplers. , 2011, , .		9
111	Integrated conformal four-beam antenna array with wide angular coverage fed by compact 4& \pm x00D7;4 Butler matrix. , 2011, , .		3
112	Ultrabroadband 4 $\&$ #x00D7; 4 Butler matrix with the use of multisection coupled-line directional couplers and phase shifters. , 2011, , .		7
113	Microstrip Antenna Arrays Fed by a Series-Parallel Slot-Coupled Feeding Network. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 991-994.	4.0	53
114	Generalized Methods for the Design of Quasi-Ideal Symmetric and Asymmetric Coupled-Line Sections and Directional Couplers. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1709-1718.	4.6	48
115	Asymmetric Coupled-Line Directional Couplers as Impedance Transformers in Balanced and \$n\$-Way Power Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1803-1810.	4.6	25
116	Miniaturized Quasi-Lumped Coupled-Line Single-Section and Multisection Directional Couplers. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 2924-2931.	4.6	24
117	Broadband 4 \$imes\$ 4 Butler Matrices as a Connection of Symmetrical Multisection Coupled-Line 3-dB Directional Couplers and Phase Correction Networks. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 1-9.	4.6	59
118	Method for the design of low-loss suspended stripline directional couplers with equalized inductive and capacitive coupling coefficients. Microwave and Optical Technology Letters, 2009, 51, 315-319.	1.4	9
119	Compact dual-band multilayer antenna element for nonlinear junction detector application. Microwave and Optical Technology Letters, 2009, 51, 696-699.	1.4	0
120	Threeâ€section symmetrical 3â€dB directional coupler in multilayer microstrip technology designed with the use of multiâ€technique compensation. Microwave and Optical Technology Letters, 2009, 51, 902-906.	1.4	7
121	Application of a rat-race coupler in low-cost load and source pull transistor amplifier design. Microwave and Optical Technology Letters, 2009, 51, 2537-2541.	1.4	7
122	Integrated dual-band dual-polarized antenna element for SAR applications. , 2009, , .		4
123	Dual-polarized stacked C-band antenna element with novel hairpin-type contactless stripline to stripline transition in multilayer integrated structure for SAR applications. , 2009, , .		4
124	Design of high-performance broadband multisection symmetrical 3-DB directional couplers. Microwave and Optical Technology Letters, 2008, 50, 636-638.	1.4	22
125	Integrated Dual-Band Antenna Array for Application in Nonlinear Junction Detection Device., 2008,,.		0
126	Dual-band Capacitive Feed Antenna for Nonlinear Junction Detection Device., 2008,,.		13

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127	Multilayer surface-mount 3dB directional coupler for application in balanced modulators., 2008,,.		2
128	Four-element series-fed antenna subarray for high-frequency antenna applications. , 2007, , .		8
129	Broadband multisection asymmetric 8.34-dB directional coupler with improved directivity., 2007,,.		11
130	Design of high-performance three-strip 3-DB directional coupler in multilayer technology with compensated parasitic reactances. Microwave and Optical Technology Letters, 2007, 49, 1656-1659.	1.4	18
131	Improved Multilayer Transmission-Line Crossover for Butler Matrix Applications., 2006,,.		3
132	GSM/DCS/UMTS Planar Medium Gain Outdoor Anntena. , 2006, , .		1
133	Influence of Curvature Radius on Radiation Patterns in Multibeam Conformal Antennas., 2006,,.		16