

Krzysztof Wincza

List of Publications by Year in descending order

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871
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#	ARTICLE	IF	CITATIONS
1	Broadband Integrated 8×8 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
2	Broadband 4×4 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
3	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
4	Low-Cost Microwave Vector System for Liquid Properties Monitoring. IEEE Transactions on Industrial Electronics, 2018, 65, 1665-1674.	7.9	51
5	Broadband Rat-Race Couplers With Coupled-Line Section and Impedance Transformers. IEEE Microwave and Wireless Components Letters, 2012, 22, 22-24.	3.2	49
6	Scalable Multibeam Antenna Arrays Fed by Dual-Band Modified Butler Matrices. IEEE Transactions on Antennas and Propagation, 2016, 64, 1287-1297.	5.1	49
7	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
8	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
9	Broadband Planar Fully Integrated 8×8 Butler Matrix Using Coupled-Line Directional Couplers. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2441-2446.	4.6	42
10	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
11	Broadband Multibeam Antenna Arrays Fed by Frequency-Dependent Butler Matrices. IEEE Transactions on Antennas and Propagation, 2017, 65, 4539-4547.	5.1	35
12	Six-Port Reflectometer Providing Enhanced Power Distribution. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-13.	4.6	33
13	Coupled-Line Sensor With Marchand Balun as RF System for Dielectric Sample Detection. IEEE Sensors Journal, 2016, 16, 88-96.	4.7	29
14	Series-Fed Microstrip Antenna Lattice With Switched Polarization Utilizing Butler Matrix. IEEE Transactions on Antennas and Propagation, 2014, 62, 145-152.	5.1	26
15	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
16	Broadband Measurements of S -Parameters Utilizing 4×4 Butler Matrices. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1692-1699.	4.6	25
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	Design of high-performance broadband multisection symmetrical 3-DB directional couplers. Microwave and Optical Technology Letters, 2008, 50, 636-638.	1.4	22
20	Broadband Measurements of S_{11} -Parameters With the Use of a Single 8×8 Butler Matrix. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 352-360.	4.6	21
21	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
22	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
23	Liquids Permittivity Measurement Using Two-Wire Transmission Line Sensor. IEEE Sensors Journal, 2018, 18, 7458-7466.	4.7	17
24	Influence of Curvature Radius on Radiation Patterns in Multibeam Conformal Antennas. , 2006, , .		16
25	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
26	Differentially Fed Directional Couplers With Coupled-Conductors of Unequal Widths. IEEE Microwave and Wireless Components Letters, 2018, 28, 759-761.	3.2	16
27	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
28	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
29	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
30	Directional couplers with reduced coupling requirements as connection of coupled $\lambda/4$ line sections and left-handed transmission lines. IET Microwaves, Antennas and Propagation, 2014, 8, 580-588.	1.4	14
31	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
32	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
33	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
34	Dual-band Capacitive Feed Antenna for Nonlinear Junction Detection Device. , 2008, , .		13
35	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
36	Miniaturized quasi-lumped coupled-line single-section directional coupler designed in multilayer LTCC technology. Microwave and Optical Technology Letters, 2013, 55, 1401-1405.	1.4	12

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37	Design and accuracy analysis of a broadband six-port reflectometer utilizing coupled-line directional couplers. <i>Microwave and Optical Technology Letters</i> , 2013, 55, 1485-1490.	1.4	12
38	Complex permittivity and permeability estimation by reflection measurements of open and short coaxial transmission line. <i>Microwave and Optical Technology Letters</i> , 2014, 56, 727-732.	1.4	12
39	Switched-beam antenna array with broadside beam fed by modified butler matrix for radar receiver application. <i>Microwave and Optical Technology Letters</i> , 2014, 56, 732-735.	1.4	12
40	Multisection Couplers With Coupled-Line Sections Having Unequal Lengths. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2014, 62, 1461-1469.	4.6	12
41	Broadband multisection asymmetric 8.34-dB directional coupler with improved directivity. , 2007, , .		11
42	A Broadband 3 dB Tandem Coupler Utilizing Right/Left Handed Transmission Line Sections. <i>IEEE Microwave and Wireless Components Letters</i> , 2014, 24, 236-238.	3.2	11
43	Detection of methanol contamination in ethyl alcohol employing a purpose-designed high-sensitivity microwave sensor. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 174, 108993.	5.0	11
44	Ultra-Wideband Dual-Line Multiprobe Reflectometer. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2017, 65, 1324-1333.	4.6	10
45	Application of 3-D Printing Technology for the Realization of High-Performance Directional Couplers in Suspended Stripline Technique. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2019, 9, 1652-1658.	2.5	10
46	Method for the design of low-loss suspended stripline directional couplers with equalized inductive and capacitive coupling coefficients. <i>Microwave and Optical Technology Letters</i> , 2009, 51, 315-319.	1.4	9
47	Broadband 4 × 4 Butler matrices utilizing tapered-coupled-line directional couplers. , 2011, , .		9
48	Compact Integrated Feeding Network for Excitation of Dual-Circular Polarization in Series-Fed Antenna Lattice. <i>IEEE Transactions on Antennas and Propagation</i> , 2014, 62, 5876-5879.	5.1	9
49	Reduced-Length Two-Section Directional Couplers Designed as Coupled-Line Sections Connected With the Use of Uncoupled Lines. <i>IEEE Microwave and Wireless Components Letters</i> , 2014, 24, 376-378.	3.2	9
50	Frequency-Selective Feeding Network Based on Directional Filter for Constant-Beamwidth Scalable Antenna Arrays. <i>IEEE Transactions on Antennas and Propagation</i> , 2017, 65, 4346-4350.	5.1	9
51	Effectiveness of Sensors Contact Metallization (Ti, Au, and Ru) and Biofunctionalization for <i>Escherichia coli</i> Detection. <i>Sensors</i> , 2018, 18, 2912.	3.8	9
52	Planar single and dual-resonant microwave biosensors for label-free bacteria detection. <i>Sensors and Actuators B: Chemical</i> , 2022, 351, 130899.	7.8	9
53	Four-element series-fed antenna subarray for high-frequency antenna applications. , 2007, , .		8
54	Folded single-layer 8 Å– 8 Butler matrix. <i>Journal of Electromagnetic Waves and Applications</i> , 2017, 31, 1386-1398.	1.6	8

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55	Three-section symmetrical 3-dB directional coupler in multilayer microstrip technology designed with the use of multi-technique compensation. <i>Microwave and Optical Technology Letters</i> , 2009, 51, 902-906.	1.4	7
56	Application of a rat-race coupler in low-cost load and source pull transistor amplifier design. <i>Microwave and Optical Technology Letters</i> , 2009, 51, 2537-2541.	1.4	7
57	Ultrabroadband 4 × 4 Butler matrix with the use of multisection coupled-line directional couplers and phase shifters. , 2011, , .		7
58	Composite right/left-handed leaky-wave antenna with adjustable radiation bandwidth. <i>Journal of Electromagnetic Waves and Applications</i> , 2016, 30, 1054-1063.	1.6	7
59	Low-Loss Directional Filters Based on Differential Band-Reject Filters With Improved Isolation Using Phase Inverter. <i>IEEE Microwave and Wireless Components Letters</i> , 2018, 28, 314-316.	3.2	7
60	Experimental Verification of 3D Printed Low-Conductivity Graphene-Enhanced PLA Absorbers for Back Lobe Suppression in Aperture-Coupled Antennas. , 2018, , .		7
61	A 24 GHz Microwave Sensor With Built-in Calibration Capability Designed in MMIC Technology. <i>IEEE Access</i> , 2021, 9, 31513-31524.	4.2	7
62	Multisection Ultra-Broadband Directional Coupler Designed in MMIC Technology. <i>IEEE Access</i> , 2021, 9, 33478-33486.	4.2	7
63	Broadband matrix-type feeding networks for two-beam antennas with constant beamwidth and efficient aperture utilization. <i>Journal of Electromagnetic Waves and Applications</i> , 2019, 33, 236-248.	1.6	6
64	Broadband feeding networks based on directional filters for two-beam antenna arrays. <i>Journal of Electromagnetic Waves and Applications</i> , 2020, 34, 1300-1307.	1.6	6
65	Analog coherent detection in application to high-sensitivity nonlinear junction detectors. , 2011, , .		5
66	Broadband three-section symmetrical directional couplers with reduced coupling coefficient requirements. <i>Microwave and Optical Technology Letters</i> , 2013, 55, 639-645.	1.4	5
67	Analysis of tem three-section symmetrical directional couplers with tandem-connected center section. <i>Microwave and Optical Technology Letters</i> , 2013, 55, 2578-2582.	1.4	5
68	Ultrabroadband multiprobe reflectometer. <i>Microwave and Optical Technology Letters</i> , 2015, 57, 1968-1971.	1.4	5
69	Direct N-QAM multiport modulators utilizing butler matrices. , 2016, , .		5
70	Single-layer four-beam microstrip antenna array. , 2017, , .		5
71	Realization of Compact Patch Antennas on Magneto-Dielectric Substrate Using 3D Printing Technology with Iron-Enhanced PLA Filament. , 2018, , .		5
72	Frequency Multiplexer With Improved Selectivity Using Asymmetric Response Directional Filters. <i>IEEE Microwave and Wireless Components Letters</i> , 2018, 28, 491-493.	3.2	5

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73	Application of Additive Manufacturing Technologies for Realization of Multilayer Microstrip Directional Filter. , 2018, , .		5
74	Suspended Microstrip Low-Pass Filter Realized Using FDM Type 3D Printing with Conductive Copper-Based Filament. , 2018, , .		5
75	High-performance differentially fed coupled-line directional couplers realised in inhomogeneous medium. IET Microwaves, Antennas and Propagation, 2019, 13, 2005-2012.	1.4	5
76	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
77	Octave-Band Four-Beam Antenna Arrays with Stable Beam Direction Fed by Broadband 4-Port Butler Matrix. Electronics (Switzerland), 2021, 10, 2712.	3.1	5
78	Integrated dual-band dual-polarized antenna element for SAR applications. , 2009, , .		4
79	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
80	Symmetrical series-fed dual-polarised microstrip antenna lattice with odd number of radiating elements. IET Microwaves, Antennas and Propagation, 2016, 10, 701-708.	1.4	4
81	Chebyshev-Response Branch-Line Couplers with Enhanced Bandwidth and Arbitrary Coupling Level. Electronics (Switzerland), 2020, 9, 1828.	3.1	4
82	Microwave-based Nitrogen Dioxide Gas Sensor For Automotive Applications. , 2021, , .		4
83	Improved Multilayer Transmission-Line Crossover for Butler Matrix Applications. , 2006, , .		3
84	Integrated conformal four-beam antenna array with wide angular coverage fed by compact 4-Port Butler matrix. , 2011, , .		3
85	Nano-thin CuO films doped with Au and Pd for gas sensors applications. , 2013, , .		3
86	Accurate broadband multiport reflectometer. Microwave and Optical Technology Letters, 2014, 56, 2884-2887.	1.4	3
87	Impedance Transforming Tandem Couplers With Increased Bandwidth and Transformation Ratio. IEEE Microwave and Wireless Components Letters, 2018, 28, 299-301.	3.2	3
88	Composite right-/left-handed leaky-wave antenna utilizing coupled-line sections. Journal of Electromagnetic Waves and Applications, 2018, 32, 768-780.	1.6	3
89	Impedance transforming rat-race couplers with modified Lange section. Journal of Electromagnetic Waves and Applications, 2018, 32, 972-983.	1.6	3
90	Monolithic Miniaturized Differentially-Fed Branch-Line Directional Coupler in GaAs Monolithic Technology. Electronics (Switzerland), 2020, 9, 446.	3.1	3

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91	Realization of High-Performance Broadband Quadrature Directional Couplers in UMS PH25 Technology. <i>Electronics (Switzerland)</i> , 2019, 8, 1520.	3.1	3
92	Multilayer surface-mount 3dB directional coupler for application in balanced modulators. , 2008, , .		2
93	Miniaturized broadband 4 × 4 Butler matrix designed with the use of quasi-lumped coupled-line couplers. , 2012, , .		2
94	Meandered coupled-line single-section directional coupler designed in multilayer LTCC technology. , 2012, , .		2
95	Ultrabroadband 8 Å— 8 Butler matrix designed with the use of multisection directional couplers and phase correction networks. <i>Microwave and Optical Technology Letters</i> , 2012, 54, 1375-1380.	1.4	2
96	Broadband ten-port reflectometer with enhanced measurement accuracy. , 2015, , .		2
97	Pseudo-highpass filters based on semi-distributed balanced composite right/left-handed unit cells. <i>Journal of Electromagnetic Waves and Applications</i> , 2015, 29, 2171-2177.	1.6	2
98	Polarization purity improvement method for linear series-fed antenna arrays. , 2016, , .		2
99	Planar composite right/left-handed leaky-wave antenna featuring dual beam. , 2017, , .		2
100	Approach to the design of wideband antenna arrays with reduced coupling between elements. , 2017, , .		2
101	Integrated two-beam antenna array featuring dual-circular polarization. , 2017, , .		2
102	Design of 3-dB Differentially-Fed Tandem Directional Couplers. , 2019, , .		2
103	Broadband Differentially-Fed Directional Coupler Composed of Coupled and Uncoupled Sections. , 2019, , .		2
104	Multisection tandem couplers with coupledâ€line sections having unequal lengths. <i>Microwave and Optical Technology Letters</i> , 2020, 62, 2488-2492.	1.4	2
105	Four-Node Antenna Feeding Network for Interfacing With Differential Front-End Electronics. <i>IEEE Access</i> , 2021, 9, 103728-103736.	4.2	2
106	Broadband Equal-Split Directional Couplers Composed of Cascade- and Tandem-Connected Coupled-Line Sections Having Unequal Lengths. <i>IEEE Access</i> , 2021, 9, 117434-117443.	4.2	2
107	GSM/DCS/UMTS Planar Medium Gain Outdoor Antenna. , 2006, , .		1
108	Miniaturized broadband multisection coupled-line wilkinson power divider designed with the use of quasi-lumped element technique. , 2012, , .		1

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109	Broadband waveguide-to-microstrip transition with coupled tuning elements. <i>Microwave and Optical Technology Letters</i> , 2012, 54, 2787-2789.	1.4	1
110	Miniaturized broadband three-section symmetrical directional coupler with reduced coupling coefficient requirements. , 2013, , .		1
111	Improved design of an ultra-broadband probe for multiprobe reflectometers. , 2015, , .		1
112	Octave-band aperture-stacked microstrip antenna element for wideband antenna arrays. , 2016, , .		1
113	Two-dimensional beamwidth broadening of microstrip antenna arrays. , 2016, , .		1
114	Linear-polarized three-beam four-element antenna array with reduced sidelobe level. , 2016, , .		1
115	Impedance transforming directional couplers with increased achievable transformation ratio. <i>International Journal of Microwave and Wireless Technologies</i> , 2017, 9, 509-513.	1.9	1
116	Series-fed antenna lattice featuring dual-circular polarization with integrated feeding network. , 2017, , .		1
117	Wideband six-port reflectometer. , 2018, , .		1
118	Broadband Differentially-Fed Substrate-Integrated Directional Coupler. , 2019, , .		1
119	Modal phase velocity compensation in multilayer differentially fed directional couplers. <i>Microwave and Optical Technology Letters</i> , 2020, 62, 1882-1887.	1.4	1
120	Differential Bi-Level Microstrip Directional Coupler with Equalized Coupling Coefficients for Directivity Improvement. <i>Electronics (Switzerland)</i> , 2020, 9, 547.	3.1	1
121	Extraction of Parallel-Coupled and End-Coupled TEM Resonator Networks from a Coupling Matrix in the Design of Coupled-Resonator Filters. <i>Electronics (Switzerland)</i> , 2022, 11, 1250.	3.1	1
122	Integrated Dual-Band Antenna Array for Application in Nonlinear Junction Detection Device. , 2008, , .		0
123	Compact dual-band multilayer antenna element for nonlinear junction detector application. <i>Microwave and Optical Technology Letters</i> , 2009, 51, 696-699.	1.4	0
124	Series-fed linear antenna array with slot coupler as power divider and 180° phase shifter. , 2012, , .		0
125	The gas micropreconcentrators in LTCC and MEMS technologies for breath acetone analysis. , 2012, , .		0
126	A broadband low-cost antenna array for frequency modulated continuous wave (FMCW) radars operating at 24 GHz. , 2012, , .		0

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127	Reduced sidelobe switched beam antenna array for driver's fatigue level Doppler sensor. , 2013, , .		0
128	Suspended-strip-coaxial line impedance-transforming directional coupler. , 2016, , .		0
129	Modified series-fed dual-polarized antenna lattice with improved bandwidth. , 2016, , .		0
130	Polarization purity improvement of a coupled-line leaky-wave antenna. , 2016, , .		0
131	Dual-Circular Polarized Antenna Lattice with Odd Number of Radiating Elements and Integrated Feeding Network. , 2018, , .		0
132	Differentially-fed directional filter with differential edge-coupled-line sections. , 2019, , .		0
133	Selectivity improved directional filters using cross-coupling introduced transmission zeros. Journal of Electromagnetic Waves and Applications, 2019, 33, 2126-2141.	1.6	0