

Robert Weigel

List of Publications by Year in descending order

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299
papers

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201385

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299
all docs

299
docs citations

299
times ranked

3399
citing authors

#	ARTICLE	IF	CITATIONS
1	Millimeter-Wave Technology for Automotive Radar Sensors in the 77 GHz Frequency Band. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 845-860.	2.9	1,020
2	Microwave-Based Noninvasive Concentration Measurements for Biomedical Applications. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2195-2204.	2.9	228
3	Six-Port Radar Sensor for Remote Respiration Rate and Heartbeat Vital-Sign Monitoring. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2093-2100.	2.9	133
4	Radar-Based Heart Sound Detection. Scientific Reports, 2018, 8, 11551.	1.6	99
5	A 77-GHz SiGe Integrated Six-Port Receiver Front-End for Angle-of-Arrival Detection. IEEE Journal of Solid-State Circuits, 2012, 47, 1966-1973.	3.5	83
6	A 125-GHz Permittivity Sensor With Read-Out Circuit in a 250-nm SiGe BiCMOS Technology. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2185-2194.	2.9	64
7	Promise of a Better Position. IEEE Microwave Magazine, 2012, 13, S41-S49.	0.7	57
8	Crosstalk in Circular Arrays of Magnetic Sensors for Current Measurement. IEEE Transactions on Industrial Electronics, 2017, 64, 4903-4909.	5.2	57
9	Single- and Dual-Port 50-100-GHz Integrated Vector Network Analyzers With On-Chip Dielectric Sensors. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 2168-2179.	2.9	54
10	An FPGA-Based Fully Synchronized Design of a Bilateral Filter for Real-Time Image Denoising. IEEE Transactions on Industrial Electronics, 2014, 61, 4093-4104.	5.2	52
11	Tag, You're It: Ranging and Finding via RFID Technology. IEEE Microwave Magazine, 2013, 14, 36-46.	0.7	51
12	Highly Integrated 4â€“32-GHz Two-Port Vector Network Analyzers for Instrumentation and Biomedical Applications. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 229-244.	2.9	49
13	Multimode TRL Calibration Technique for Characterization of Differential Devices. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2220-2247.	2.9	48
14	Influence of the Conductor Position on a Circular Array of Hall Sensors for Current Measurement. IEEE Transactions on Industrial Electronics, 2019, 66, 580-585.	5.2	46
15	Fusion of Nonintrusive Environmental Sensors for Occupancy Detection in Smart Homes. IEEE Internet of Things Journal, 2018, 5, 2343-2352.	5.5	44
16	A six-port interferometer based micrometer-accuracy displacement and vibration measurement radar. , 2012, , .		43
17	Millimeter-Wave and Terahertz Transceivers in SiGe BiCMOS Technologies. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4541-4560.	2.9	43
18	A dataset of clinically recorded radar vital signs with synchronised reference sensor signals. Scientific Data, 2020, 7, 291.	2.4	41

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19	Reader Architectures for Wireless Surface Acoustic Wave Sensors. <i>Sensors</i> , 2018, 18, 1734.	2.1	38
20	On fast chirp modulations and compressed sensing for automotive radar applications. , 2014, , .		35
21	A 70â€“90-GHz High-Linearity Multi-Band Quadrature Receiver in μSiGe Technology. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2013, 61, 4600-4612.	2.9	34
22	Local Pulse Wave Detection Using Continuous Wave Radar Systems. <i>IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology</i> , 2017, 1, 81-89.	2.3	34
23	Automatic Signal Quality Index Determination of Radar-Recorded Heart Sound Signals Using Ensemble Classification. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 773-785.	2.5	34
24	BATS: Adaptive Ultra Low Power Sensor Network for Animal Tracking. <i>Sensors</i> , 2018, 18, 3343.	2.1	33
25	Circuit Agility. <i>IEEE Microwave Magazine</i> , 2012, 13, 111-121.	0.7	31
26	Remote Powered Medical Implants for Telemonitoring. <i>Proceedings of the IEEE</i> , 2014, 102, 1811-1832.	16.4	30
27	I/Q imbalance compensation for Six-port interferometers in radar applications. , 2014, , .		29
28	Industrial mmWave Radar Sensor in Embedded Wafer-Level BGA Packaging Technology. <i>IEEE Sensors Journal</i> , 2016, , 1-1.	2.4	29
29	The Influence of Interference Sources on a Magnetic Field-Based Current Sensor for Multiconductor Measurement. <i>IEEE Sensors Journal</i> , 2018, 18, 6782-6787.	2.4	29
30	A dataset of radar-recorded heart sounds and vital signs including synchronised reference sensor signals. <i>Scientific Data</i> , 2020, 7, 50.	2.4	28
31	High- Q Inductors Embedded in the Fan-Out Area of an eWLB. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2012, 2, 1280-1292.	1.4	27
32	Advanced template matching algorithm for instantaneous heartbeat detection using continuous wave radar systems. , 2017, , .		26
33	High-Speed Resonant Surface Acoustic Wave Instrumentation Based on Instantaneous Frequency Measurement. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2017, 66, 974-984.	2.4	25
34	A Low-Power Low-Noise Single-Chip Receiver Front-End for Automotive Radar at 77 GHz in Silicon-Germanium Bipolar Technology. , 2007, , .		24
35	A Clinically Evaluated Interferometric Continuous-Wave Radar System for the Contactless Measurement of Human Vital Parameters. <i>Sensors</i> , 2019, 19, 2492.	2.1	24
36	Target simulator concept for chirp modulated 77 GHz automotive radar sensors. , 2014, , .		23

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37	Multilayer Topology Optimization of Wideband SIW-to-Waveguide Transitions. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1326-1339.	2.9	23
38	A 4â€“32-GHz Chipset for a Highly Integrated Heterodyne Two-Port Vector Network Analyzer. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-14.	2.9	22
39	A Molecular Communication Testbed Based on Proton Pumping Bacteria: Methods and Data. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2019, 5, 56-62.	1.4	22
40	A Scalable 77 GHz Massive MIMO FMCW Radar by Cascading Fully-Integrated Transceivers. , 2018, , .		20
41	Enhancing RF Bulk Acoustic Wave Devices: Multiphysical Modeling and Performance. IEEE Microwave Magazine, 2019, 20, 56-70.	0.7	20
42	Contactless analysis of heart rate variability during cold pressor test using radar interferometry and bidirectional LSTM networks. Scientific Reports, 2021, 11, 3025.	1.6	19
43	A Mixed-Signal Technique for TX-Induced Modulated Spur Cancellation in LTE-CA Receivers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3060-3073.	3.5	18
44	Influence of the PCB Manufacturing Process on the Measurement Error of Planar Relative Permittivity Sensors Up To 100 GHz. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2793-2804.	2.9	18
45	Continuous In-Bed Monitoring of Vital Signs Using a Multi Radar Setup for Freely Moving Patients. Sensors, 2020, 20, 5827.	2.1	18
46	A 122 GHz Multiprobe Reflectometer for Dielectric Sensor Readout in SiGe BiCMOS Technology. , 2011, , .		17
47	Reflection, Refraction, and Self-Jamming. IEEE Microwave Magazine, 2012, 13, 107-117.	0.7	17
48	A fully integrated 120-GHz six-port receiver front-end in a 130-nm SiGe BiCMOS technology. , 2013, , .		17
49	A 50-100-GHz Highly Integrated Octave-Bandwidth Transmitter and Receiver Chipset in μSiGe Technology. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 2118-2131.	2.9	17
50	A compact back-plaster sensor node for dementia and Alzheimer patient care. , 2014, , .		17
51	Energy-Efficient Wireless Sensing Using a Generic ADC Sensor Interface Within a Passive Multi-Standard RFID Transponder. IEEE Sensors Journal, 2011, 11, 2698-2710.	2.4	16
52	High-Resolution Millimeter-Wave Tomography System for Nondestructive Testing of Low-Permittivity Materials. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 1105-1113.	2.9	16
53	A Bayesian Framework for Integrated Deep Metric Learning and Tracking of Vulnerable Road Users Using Automotive Radars. IEEE Access, 2021, 9, 68758-68777.	2.6	16
54	A tunable and reduced size power divider using ferroelectric thin-film varactors. , 2008, , .		15

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55	Six-Port Technology for Traffic Safety. IEEE Microwave Magazine, 2012, 13, 118-127.	0.7	15
56	The influence of rain on small aperture LiDAR sensors. , 2016, , .		15
57	Segmental polynomial approximation based phase error correction for precise near field displacement measurements using Six-Port microwave interferometers. , 2017, , .		15
58	High-Precision Interferometric Radar for Sheet Thickness Monitoring. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 3153-3166.	2.9	15
59	Microw(h)att?! Ultralow-Power Six-Port Radar: Realizing Highly Integrated Portable Radar Systems with Good Motion Sensitivity at Relatively Low Cost. IEEE Microwave Magazine, 2018, 19, 91-98.	0.7	15
60	Multi-Modal Cross Learning for Improved People Counting using Short-Range FMCW Radar. , 2020, , .		15
61	Micrometer Sensing With Microwaves: Precise Radar Systems for Innovative Measurement Applications. IEEE Journal of Microwaves, 2021, 1, 202-217.	4.9	15
62	Correcting nonlinearity and temperature influence of sensors through B-spline modeling. , 2010, , .		13
63	A 62 GHz reflectometer for biomedical sensor readout in SiGe BiCMOS technology. , 2012, , .		13
64	A method for the determination of the complex permittivity by detuned ring resonators for bulk materials up to 110 GHz. International Journal of Microwave and Wireless Technologies, 2015, 7, 251-260.	1.5	13
65	Implementation of simultaneous energy and data transfer in a contactless connector. , 2016, , .		13
66	Investigation on Third-Order Intermodulation Distortions Due to Material Nonlinearities in TC-SAW Devices. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1914-1924.	1.7	13
67	Mechanically Flexible Sensor Array for Current Measurement. IEEE Transactions on Instrumentation and Measurement, 2020, , 1-1.	2.4	13
68	A low power 24 GHz radar system for occupancy monitoring. , 2015, , .		12
69	Improved calibration procedure for six-port based precise displacement measurements. , 2016, , .		12
70	Impact Of High Sc Content On Crystal Morphology And RF Performance Of Sputtered Al _{1-x} Sc _x SMR BAW. , 2019, , .		12
71	Miniaturized Ultra-Wideband Antenna Design for Human Implants. , 2020, , .		12
72	Data-Driven Radar Processing Using a Parametric Convolutional Neural Network for Human Activity Classification. IEEE Sensors Journal, 2021, 21, 19529-19540.	2.4	12

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73	Human Activity Classification Using mm-Wave FMCW Radar by Improved Representation Learning. , 2020, , .		12
74	An interstage filter-free mobile radio receiver with integrated TX leakage filtering. , 2010, , .		11
75	A wide-range 77 GHz Direction of Arrival detector with integrated dual six-port receiver. , 2012, , .		11
76	A Method for Accurate Modeling of BAW Filters at High Power Levels. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2207-2214.	1.7	11
77	Considerations on the de-embedding of differential devices using two-port techniques. International Journal of Microwave and Wireless Technologies, 2010, 2, 349-357.	1.5	10
78	Ultra-short-range, precise displacement measurement setup with a near field slot-line antenna and a dedicated spiral calibration. , 2015, , .		10
79	A High-Sensitivity Radar System Featuring Low Weight and Power Consumption. IEEE Microwave Magazine, 2015, 16, 99-105.	0.7	10
80	Instantaneous heartbeat detection using a cross-correlation based template matching for continuous wave radar systems. , 2016, , .		10
81	Smart communication and relative localization system for firefighters and rescuers. , 2017, , .		10
82	Contactless person identification using cardiac radar signals. , 2018, , .		10
83	Pulse Wave Velocity Detection Using a 24 GHz Six-Port Based Doppler Radar. , 2019, , .		10
84	Considerations for Harmonics Distribution in Aperture-Tuned Inverted-F Antenna for Cellular Handheld Devices. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 4122-4130.	2.9	10
85	A time difference of arrival system architecture for GSM mobile phone localization in search and rescue scenarios. , 2011, , .		9
86	An integrated 125GHz Sensor with read-out circuit for permittivity measurement of liquids. , 2012, , .		9
87	A 77 GHz direction of arrival detector system with SiGe integrated six-port receiver. , 2012, , .		9
88	A smart jamming system for UMTS/WCDMA cellular phone networks for search and rescue applications. , 2012, , .		9
89	A permittivity characterization method by detuned ring-resonators for bulk materials up to 110 GHz. , 2014, , .		9
90	Broadband Circuit Techniques for Multi-Terahertz Gain-Bandwidth-Product Low-Power Applications. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 3701-3712.	2.9	9

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91	Evaluation of a robust correlation-based true-speed-over-ground measurement system employing a FMCW radar. International Journal of Microwave and Wireless Technologies, 2019, 11, 686-693.	1.5	9
92	CMOS RF Switch With Fast Discharge Feature. IEEE Solid-State Circuits Letters, 2021, 4, 68-71.	1.3	9
93	DC-offset compensation of a 77 GHz monostatic FMCW-radar transceiver for automotive application. , 2008, , .		8
94	Signal processing strategies for six-port based Direction of Arrival detector systems. , 2012, , .		8
95	An ultra-wideband local positioning system for highly complex indoor environments. , 2012, , .		8
96	Lens-based 77 GHz MIMO radar for angular estimation in multitarget environments. International Journal of Microwave and Wireless Technologies, 2014, 6, 397-404.	1.5	8
97	Intelligent signal processing routine for instantaneous heart rate detection using a Six-Port microwave interferometer. , 2015, , .		8
98	A novel approach for reliable communications within inductive power transfer systems. , 2016, , .		8
99	A Versatile 10â€™80-Gb/s PRBS-Based Broadband Transmitter With Arbitrary 20â€™60-GHz Spectrum Shifting. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3654-3666.	2.9	8
100	5G mm-Wave Stacked Class AB Power Amplifier in 45 nm PD-SOI CMOS. , 2018, , .		8
101	An RF Voltage Detector with Low Harmonic Feedback for Antenna Tuning Switches. , 2019, , .		8
102	Comparing mmWave Channel Simulators in Vehicular Environments. , 2021, , .		8
103	Analysis of a built-in test architecture for direct-conversion SiGe millimeter-wave receiver frontends. , 2010, , .		7
104	Image denoising using bilateral filter with noise-adaptive parameter tuning. , 2011, , .		7
105	An integrated 77-GHz six-port receiver front-end for angle-of-arrival detection. , 2011, , .		7
106	A low-cost 2.4GHz frequency measurement system for microsecond time domain pulses based on Six-Port technology. , 2014, , .		7
107	Low-weight wireless sensor network for encounter detection of bats. , 2015, , .		7
108	Detector nonlinearity in Six-port radar. , 2017, , .		7

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109	Cost-effective SIW band-pass filters for millimeter wave applications a method to combine low tolerances and low prices on standard pcb substrates. , 2017, , .		7
110	Microstrip-to-waveguide transition in planar form using a substrate integrated waveguide. , 2018, , .		7
111	Novel Approach for Virtual Coupling of Trains Using Different Modulation and Coding Schemes. , 2018, , .		7
112	Robust Correlation based True-Speed-over-Ground Measurement System employing a FMCW Radar. , 2018, , .		7
113	A review on six-port radar and its calibration techniques. , 2018, , .		7
114	Modified Gilbert-Cell Mixer With an LO Waveform Shaper and Switched Gate-Biasing for 1/f Noise Reduction in 28-nm CMOS. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 1688-1692.	2.2	7
115	Towards Broadband D-Band Wireless Communication Systems using Beam Steering in SiGe BiCMOS Technology. , 2021, , .		7
116	A versatile built-in test architecture for integrated millimeter-wave radar receiver front-ends. , 2012, , .		6
117	Open-ended dielectric-filled waveguide antenna for underwater usage. , 2014, , .		6
118	Distance measurements and limitations based on guided wave 24 GHz dual tone Six-port radar. International Journal of Microwave and Wireless Technologies, 2015, 7, 425-432.	1.5	6
119	ADC depending limitations for Six-Port based distance measurement systems. , 2015, , .		6
120	Surface velocity estimation of fluids using millimetre-wave radar. , 2015, , .		6
121	100 GHz reflectometer for sensitivity analysis of MEMS sensors comprising an intermediate frequency Six-port receiver. , 2015, , .		6
122	Design of a 24 GHz reconfigurable transmitarray element with continuous phase range. , 2017, , .		6
123	Concentration and temperature dependent selectivity of the LTCC porosification process with phosphoric acid. Ceramics International, 2017, 43, 714-721.	2.3	6
124	Ultra-low-power sensor node with wake-up-functionality for smart-sensor-applications. , 2018, , .		6
125	Methods for Human Dehydration Measurement. Frequenz, 2018, 72, 159-166.	0.6	6
126	Voltage and Current Selector-Based Biasing Topology for Multiple Supply Voltage Circuits. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 11-15.	2.2	6

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127	Design of a 60 GHz 32% PAE Class-AB PA with 2 nd Harmonic Control in 45-nm PD-SOI CMOS. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 2635-2646.	3.5	6
128	Full Physical Layer Simulation Tool to Design Future 77 GHz JCRS-Applications. IEEE Access, 2022, 10, 47437-47460.	2.6	6
129	gm-Boosted VCO with low power consumption and large tuning range. , 2007, , .		5
130	A low power fall detection and activity monitoring system for nursing facilities and hospitals. , 2014, , .		5
131	A CMOS image sensor with analog pre-processing capability suitable for smart camera applications. , 2015, , .		5
132	Precise and fast frequency determination of resonant SAW sensors by a low-cost Six-Port interferometer. , 2016, , .		5
133	Digital phase correction for multiplexed ADCs in low-cost Six-Port interferometers. , 2016, , .		5
134	Low latency evaluation of an adaptive industrial wireless communications system for ISM bands. , 2016, , .		5
135	Reliable data link for power transfer control in an inductive charging system for electric vehicles. , 2016, , .		5
136	Zero-bias schottky power detector design for six-port based radar systems. , 2017, , .		5
137	Six-Port Based Multitone and Low-Power Radar System for Waveguide Measurements in Smart Factories. , 2018, , .		5
138	Antenna Aperture Tuning with High-Voltage Bulk-CMOS Switch-Based RF Capacitor. , 2019, , .		5
139	Hardware Toolkit for Rapid Prototyping of Antenna Tuning Systems. , 2019, , .		5
140	Simulation Environment of a Communication System Using CDMA at 77 GHz. , 2020, , .		5
141	A Robust Digital Predistortion Algorithm for 5G MIMO: Modeling a MIMO Scenario With Two Nonlinear MIMO Transmitters Including a Cross-Coupling Effect. IEEE Microwave Magazine, 2020, 21, 54-62.	0.7	5
142	Electrothermal Modeling of Surface Acoustic Wave Resonators and Filters. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2423-2432.	1.7	5
143	Generative Adversarial Network based Extended Target Detection for Automotive MIMO Radar. , 2020, , .		5
144	A Technology Independent Synthesis Approach for Integrated mmWave Coupled Line Circuits. , 2020, , .		5

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145	Miniaturized Hybrid Frequency Reader for Contactless Measurement Scenarios Using Resonant Surface Acoustic Wave Sensors. <i>Sensors</i> , 2021, 21, 2367.	2.1	5
146	A Broadband Zero-IF Down-Conversion Mixer in 130 nm SiGe BiCMOS for Beyond 5G Communication Systems in D-Band. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2021, 68, 2277-2281.	2.2	5
147	Busbar Current Measurement With Elliptical Sensor Arrays Without Conductor Specific Calibration. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-9.	2.4	5
148	Crosstalk in Elliptical Sensor Arrays for Current Measurement. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-11.	2.4	5
149	Linear tapered diplexing distributed power amplifier for mobile phone application. , 2011, , .		4
150	Depth and Rate of the Save. <i>IEEE Microwave Magazine</i> , 2012, 13, S14-S21.	0.7	4
151	SAW and CMOS RFID transponder-based wireless systems and their applications. , 2012, , .		4
152	Degradation of the Conducted Radio Frequency Immunity of Microcontrollers Due to Electromagnetic Resonances in Foot-Point Loops. <i>IEEE Transactions on Electromagnetic Compatibility</i> , 2012, 54, 772-784.	1.4	4
153	A cognitive system for future-proof wireless microphones: Concept, implementation and results. , 2013, , .		4
154	A new approach on MEMS sensor batch testing using an analogue parallel test methodology for massive reduction of test time. , 2013, , .		4
155	Ultra-wideband small antenna subarray module with narrow elevation pattern. , 2013, , .		4
156	A novel, W-band microwave based contactless test method for mechanical sensitivity analysis of MEMS. , 2013, , .		4
157	A low power CMOS transmitter with Class-E power amplifiers for positioning application in multi-band. , 2016, , .		4
158	Let's Make Them Cognitive Cognitive Radio Technology Applied to Professional Wireless Microphone Systems. <i>IEEE Microwave Magazine</i> , 2016, 17, 70-78.	0.7	4
159	RSSI-based localization with minimal infrastructure using multivariate statistic techniques. , 2017, , .		4
160	A Coplanar Waveguide Resonator Based In-Line Material Characterization Sensor for Bulk and Metallized Dielectrics. <i>Frequenz</i> , 2017, 71, .	0.6	4
161	Examination of OFDM for wireless train-onboard communication. , 2018, , .		4
162	Evaluation of cellular standards for low data rate applications regarding power consumption and timing parameters. , 2018, , .		4

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163	An Accurate Free Space Method for Material Characterization in W- Band Using Material Samples with Two Different Thicknesses. , 2018, , .		4
164	Enhanced mobile node design for small size animal borne wireless sensor nodes with encounter detection and localization. , 2018, , .		4
165	A 60 GHz 30.5% PAE Differential Stacked PA with Second Harmonic Control in 45 nm PD-SOI CMOS. , 2019, , .		4
166	122 GHz Low-cost Substrate Integrated Waveguide based Leaky-Wave Antenna Design. , 2019, , .		4
167	Highly-Integrated <math>0.14\text{mm}²</math> D-Band Receiver Front-Ends for Radar and Imaging Applications in a 130 nm SiGe BiCMOS Technology. , 2019, , .		4
168	Simulations of a New Design Concept for Hybrid Ladder Filters. , 2019, , .		4
169	Nothing Beats SNR: Single-Digit Micrometer Ranging Using a Low-Power CW Radar Featuring a Low-Weight 3D-Printed Horn Antenna. IEEE Microwave Magazine, 2020, 21, 88-95.	0.7	4
170	Linearity Analysis of High-Voltage RF Switches for Antenna Tuning Applications. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 14-23.	2.9	4
171	Evaluation of Different Antenna Positions for Joint Radar-Communication at 77 GHz. , 2021, , .		4
172	Combining Radar and Communication at 77 GHz Using a CDMA Technique. , 2020, , .		4
173	Validation and Analysis of the Propagation Channel at 60 GHz for Vehicular Communication. , 2021, , .		4
174	HARadNet: Anchor-free target detection for radar point clouds using hierarchical attention and multi-task learning. Machine Learning With Applications, 2022, 8, 100275.	3.0	4
175	Modulation and filter test procedure for RF Class-S Power Amplifier architecture. , 2009, , .		3
176	Development and implementation of a feature-based automatic classification algorithm for communication standards in the 868 MHz band. , 2012, , .		3
177	Efficient firmware implementation of a multichannel scanning receiver for surveillance applications. , 2012, , .		3
178	A CMOS divider family for high frequency wireless localization systems. , 2012, , .		3
179	Device Characterization Techniques Based on Causal Relationships. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2203-2219.	2.9	3
180	A 70 GHz bandwidth low-power active balun employing common-collector resistive feedback in 0.35 µm bipolar SiGe technology. , 2014, , .		3

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181	Integrated RF transformer and power combiner design in 150nm CMOS process. , 2014, , .		3
182	Six-Port based direction finding and ranging. , 2014, , .		3
183	Underwater interferometric radar sensor for distance and vibration measurement. , 2015, , .		3
184	A Tone Mapping algorithm suited for analog-signal real-time image processing. , 2016, , .		3
185	Increased data rate using higher-order digital modulation for simultaneous inductive data and power transfer systems. , 2017, , .		3
186	In-line material characterization sensors operating at 10GHz and 77GHz. , 2017, , .		3
187	Error compensation of the temperature influence on radar based displacement measurements. , 2017, , .		3
188	Mixer assisted interferometric six-port system for accurate distance measurements. , 2017, , .		3
189	Fast dual-synthesizer for six-port in-situ linearization in the 2.4 GHz ISM-band. , 2018, , .		3
190	Electro-Thermal Modeling of TCSAW Filter. , 2018, , .		3
191	Concepts for a Monostatic Radar Transceiver Front-end in eWLB Package with Off-Chip QuasiCirculator for 60 GHz. , 2018, , .		3
192	Design of a Rotary Coupler for Data Transmission on Fast Rotating Mechanical Shafts and Roboter Arms. , 2019, , .		3
193	Extended Ellipse-based Reconstruction Algorithm for Six-port Radar. , 2019, , .		3
194	In-Situ-Linearization for Instantaneous Frequency Measurement Systems. , 2019, , .		3
195	Low-Weight Noninvasive Heart Beat Detector for Small Airborne Vertebrates. , 2020, 4, 1-4.		3
196	Postprocessing and Evaluation for a Radar-Based True-Speed-Over-Ground Estimation System. IEEE Microwave and Wireless Components Letters, 2021, 31, 1251-1254.	2.0	3
197	Channel Characterization at 77 GHz for Vehicular Communication. , 2020, , .		3
198	Model of Substrate Capacitance of MOSFET RF Switch Inspired by Inverted Microstrip Line. , 2021, , .		3

#	ARTICLE	IF	CITATIONS
199	IP2 and DC Offset Tuning in Current Mode Output Downconversion Mixers. , 2006, , .		2
200	Behavioral Mixer Model for Rapid System Simulation of a 77GHz FMCW-Radar Transceiver. , 2007, , .		2
201	An ultra-wideband coupled-line balun using patterned ground shielding structures. , 2008, , .		2
202	Short Multipath Mitigation Technique Using Feedforward Neural Networks. , 2009, , .		2
203	A state-based power estimation methodology at system level for integrated RF front-ends. , 2011, , .		2
204	A method to determine the injected real power into an IC Pin in case of a conducted immunity EMC test. , 2011, , .		2
205	Optimum transistor sizing for low-power subthreshold standard cell designs. , 2012, , .		2
206	The enhanced six-port architecture: A measurement based proof of concept. , 2012, , .		2
207	A high performance line filter for narrowband power line communication testbed applications. , 2013, , .		2
208	Dual Six-Port based direction-of-arrival detector for FMCW radar tracking in the ISM band at 24GHz. , 2013, , .		2
209	Multi-octave planar microwave slot-coupled directional coupler up to 28 GHz with novel phase velocity compensation. , 2014, , .		2
210	Signal detection and cooperative sensing with sensor nodes with limited dynamic. , 2014, , .		2
211	Ultra-wideband small modular array antenna based on column-coupled Vivaldi subarrays. , 2014, , .		2
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