

Robert Weigel

List of Publications by Year in descending order

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299
papers

4,151
citations

201385

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g-index

299
all docs

299
docs citations

299
times ranked

3399
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	A Light Weight 3x3 Switched Polarity URA Antenna and Receive System for Direction Finding. , 2022, , .		2
3	Digital Frequency Control Loop for Continuous-Wave and Stepped-Frequency Radars. , 2022, , .		0
4	Evaluation of Embedded Algorithms for a Six-Port-Based Frequency Measurement System. , 2022, , .		0
5	Crosstalk in Elliptical Sensor Arrays for Current Measurement. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	2.4	5
6	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
7	Full Physical Layer Simulation Tool to Design Future 77 GHz JCRS-Applications. IEEE Access, 2022, 10, 47437-47460.	2.6	6
8	Investigation of Systematic Errors of an Indirect Resonant Planar Material Characterization Method. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3269-3280.	2.9	1
9	Implementation and Assessment of a Radar Based True-Speed-Over-Ground Estimation Approach Utilizing Complex-Valued Correlation. , 2022, , .		2
10	A 9-Channel Phase Coherent Receive System for Direction of Arrival Estimation. , 2022, , .		2
11	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
12	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
13	Micrometer Sensing With Microwaves: Precise Radar Systems for Innovative Measurement Applications. IEEE Journal of Microwaves, 2021, 1, 202-217.	4.9	15
14	Low-Cost Six-Port for High-Volume Frequency Measurement Systems in the 2.4 GHz ISM-Band. , 2021, , .		1
15	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
16	Millimeter-Wave and Terahertz Transceivers in SiGe BiCMOS Technologies. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4541-4560.	2.9	43
17	Penta-Band Inverted-F Antenna Tuned by High-Voltage Switchable RF Capacitors. IEEE Open Journal of Antennas and Propagation, 2021, 2, 375-384.	2.5	2
18	Fast RF-Synthesizer based on Direct Digital Synthesis for an Instantaneous Frequency Measurement System. , 2021, , .		2

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19	Contactless analysis of heart rate variability during cold pressor test using radar interferometry and bidirectional LSTM networks. <i>Scientific Reports</i> , 2021, 11, 3025.	1.6	19
20	Miniaturized Hybrid Frequency Reader for Contactless Measurement Scenarios Using Resonant Surface Acoustic Wave Sensors. <i>Sensors</i> , 2021, 21, 2367.	2.1	5
21	Comparing mmWave Channel Simulators in Vehicular Environments. , 2021, , .		8
22	An Integrated Circuit for Decoupling and Tuning of Inverted-F Antennas in Cellular User Equipment. , 2021, , .		2
23	Towards Broadband D-Band Wireless Communication Systems using Beam Steering in SiGe BiCMOS Technology. , 2021, , .		7
24	Integrated Classification and Localization of Targets Using Bayesian Framework In Automotive Radars. , 2021, , .		0
25	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
26	Large-Signal Performance Optimization of Inverted-F Antenna Tuned by Switchable RF Capacitor. , 2021, , .		0
27	Reconfigurable Inverted-F Antenna for MIMO Cellular User Equipment. , 2021, , .		0
28	Data-Driven Radar Processing Using a Parametric Convolutional Neural Network for Human Activity Classification. <i>IEEE Sensors Journal</i> , 2021, 21, 19529-19540.	2.4	12
29	CMOS RF Switch With Fast Discharge Feature. <i>IEEE Solid-State Circuits Letters</i> , 2021, 4, 68-71.	1.3	9
30	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
31	Evaluation of Different Antenna Positions for Joint Radar-Communication at 77 GHz. , 2021, , .		4
32	Model of Substrate Capacitance of MOSFET RF Switch Inspired by Inverted Microstrip Line. , 2021, , .		3
33	Validation and Analysis of the Propagation Channel at 60 GHz for Vehicular Communication. , 2021, , .		4
34	Accurate Power Loss Measurements of Aperture Tuning RF Switches on Board. , 2021, , .		0
35	Quad-Band Inverted-F Antenna System Tuned by Hybrid C-Tuner. , 2021, , .		1
36	Considerations for Capacitance Measurements of Antenna Tuning RF Switches on Board. , 2021, , .		0

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37	Hybrid C-Tuner IC for 40V/80V Antenna Aperture Tuning Applications. , 2021, , .		1
38	Automatic Signal Quality Index Determination of Radar-Recorded Heart Sound Signals Using Ensemble Classification. IEEE Transactions on Biomedical Engineering, 2020, 67, 773-785.	2.5	34
39	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
40	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
41	An Automatic Detection and Data Downlink System for Miniature Bat Loggers. , 2020, , .		1
42	An Automatic Gain and Offset Control Circuit for DC-Coupled Continuous-Wave Radar Systems. , 2020, , .		2
43	A dataset of clinically recorded radar vital signs with synchronised reference sensor signals. Scientific Data, 2020, 7, 291.	2.4	41
44	Simulation Environment of a Communication System Using CDMA at 77 GHz. , 2020, , .		5
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 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
47	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
48	Low-Weight Wireless Sensor Node With Sensor-Data-Enhanced Dual-Frequency RSSI-Based Distance Estimation. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 4131-4137.	2.9	2
49	Electrothermal Modeling of Surface Acoustic Wave Resonators and Filters. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2423-2432.	1.7	5
50	Mechanically Flexible Sensor Array for Current Measurement. IEEE Transactions on Instrumentation and Measurement, 2020, , 1-1.	2.4	13
51	Generative Adversarial Network based Extended Target Detection for Automotive MIMO Radar. , 2020, , .		5
52	Multi-Modal Cross Learning for Improved People Counting using Short-Range FMCW Radar. , 2020, , .		15
53	On the Impact of System Nonlinearities in Continuous-Wave Radar Systems for Vital Parameter Sensing. , 2020, , .		2
54	Low-Weight Noninvasive Heart Beat Detector for Small Airborne Vertebrates. , 2020, 4, 1-4.		3

#	ARTICLE	IF	CITATIONS
55	A dataset of radar-recorded heart sounds and vital signs including synchronised reference sensor signals. Scientific Data, 2020, 7, 50.	2.4	28
56	Multilayer Topology Optimization of Wideband SIW-to-Waveguide Transitions. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1326-1339.	2.9	23
57	A Technology Independent Synthesis Approach for Integrated mmWave Coupled Line Circuits. , 2020, , .		5
58	Enhanced Piezoelectric $\text{Al}_x\text{Sc}_{1-x}\text{N}$ RF-MEMS Resonators for Sub-6 GHz RF-Filter Applications: Design, Fabrication and Characterization. , 2020, , .		1
59	An Ultra Broadband Multi-Tone Six-Port Radar for Distance Measurements in K-Band Waveguides. , 2020, , .		2
60	Miniaturized Ultra-Wideband Antenna Design for Human Implants. , 2020, , .		12
61	Human Activity Classification Using mm-Wave FMCW Radar by Improved Representation Learning. , 2020, , .		12
62	Rotary Coupler in Microstrip Line Design for Data Transmission in the 2.45GHz ISM Band. , 2020, , .		2
63	Channel Characterization at 77 GHz for Vehicular Communication. , 2020, , .		3
64	Linearity Trade-offs in High-Voltage RF Switches for Antenna Tuning Applications. , 2020, , .		2
65	Recent Trends in Wafer-Level Package Technology. , 2020, , .		0
66	Combining Radar and Communication at 77 GHz Using a CDMA Technique. , 2020, , .		4
67	Simultaneous Inductive Power and Data Transmission System for Smart Applications. IEEE Circuits and Systems Magazine, 2019, 19, 23-33.	2.6	2
68	Design of a Rotary Coupler for Data Transmission on Fast Rotating Mechanical Shafts and Roboter Arms. , 2019, , .		3
69	Highly Integrated Low Power Photomultiplier Readout ASIC comprising fast ADC to be used in the Antarctic Ice. , 2019, , .		0
70	A 60 GHz 30.5% PAE Differential Stacked PA with Second Harmonic Control in 45 nm PD-SOI CMOS. , 2019, , .		4
71	Extended Ellipse-based Reconstruction Algorithm for Six-port Radar. , 2019, , .		3
72	122 GHz Low-cost Substrate Integrated Waveguide based Leaky-Wave Antenna Design. , 2019, , .		4

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73	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
74	Respiration Extraction from Radar Heart Sound Measurements. , 2019, 2019, 6533-6536.		1
75	Highly-Integrated <math>0.14\text{mm}²</math>-Band Receiver Front-Ends for Radar and Imaging Applications in a 130 nm SiGe BiCMOS Technology. , 2019, , .		4
76	Measurements for Onboard Communication in a High-Speed Train up to 330 km/h for Selected Scenarios at 2.45 GHz. , 2019, , .		1
77	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
78	Simulations of a New Design Concept for Hybrid Ladder Filters. , 2019, , .		4
79	Phased Array Approach for Vehicle-to-Infrastructure Communication in Train Stations. , 2019, , .		0
80	Pulse Wave Velocity Detection Using a 24 GHz Six-Port Based Doppler Radar. , 2019, , .		10
81	Enhancing RF Bulk Acoustic Wave Devices: Multiphysical Modeling and Performance. IEEE Microwave Magazine, 2019, 20, 56-70.	0.7	20
82	A Clinically Evaluated Interferometric Continuous-Wave Radar System for the Contactless Measurement of Human Vital Parameters. Sensors, 2019, 19, 2492.	2.1	24
83	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
84	Compact low-cost substrate integrated waveguide fed antenna for 122 GHz radar applications. International Journal of Microwave and Wireless Technologies, 2019, 11, 408-412.	1.5	2
85	Quasi-Differential Operation of Capacitive Tuners for Aperture Tuning Applications. , 2019, , .		0
86	Synchronization Approaches and Improvements for a Low-Complexity Power Line Communication System. , 2019, , .		2
87	An Error Compensation Algorithm for Indirect Resonant Planar Relative Permittivity Sensor Principles up to 100 GHz. , 2019, , .		1
88	An RF Voltage Detector with Low Harmonic Feedback for Antenna Tuning Switches. , 2019, , .		8
89	In-Situ-Linearization for Instantaneous Frequency Measurement Systems. , 2019, , .		3
90	All-Pass Based Filter Design Using BAW Resonators. , 2019, , .		1

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91	A 12 GHz All-Digital PLL with linearized chirps for FMCW Radar. , 2019, , .		0
92	Antenna Aperture Tuning with High-Voltage Bulk-CMOS Switch-Based RF Capacitor. , 2019, , .		5
93	Sensor Enhanced Dual Frequency RSSI Distance Estimation for Low Weight Wireless Sensor Nodes. , 2019, , .		1
94	Hardware Toolkit for Rapid Prototyping of Antenna Tuning Systems. , 2019, , .		5
95	Frequency Readjustment of Excitation Signals for Resonant Surface Acoustic Wave Sensors in the 2.45 GHz ISM Band. , 2019, , .		2
96	Wireless Sensor Platform for Detection of Vital Parameters of Bats. , 2019, 2019, 1294-1297.		2
97	Impact Of High Sc Content On Crystal Morphology And RF Performance Of Sputtered Al _{1-x} Sc _x SMR BAW. , 2019, , .		12
98	An Open-Source Speech Codec at 450 bit/s with Pseudo-Wideband Mode. , 2019, , .		1
99	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
100	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
101	Examination of OFDM for wireless train-onboard communication. , 2018, , .		4
102	High-Precision Interferometric Radar for Sheet Thickness Monitoring. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 3153-3166.	2.9	15
103	Fast dual-synthesizer for six-port in-situ linearization in the 2.4 GHz ISM-band. , 2018, , .		3
104	Ultra-low-power sensor node with wake-up-functionality for smart-sensor-applications. , 2018, , .		6
105	Methods for Human Dehydration Measurement. Frequenz, 2018, 72, 159-166.	0.6	6
106	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
107	Frequency agile filter for image frequency rejection in an adjustable receiver frontend. , 2018, , .		0
108	Design and characterization of antenna arrays in eWLB package for 61 GHz radar applications. , 2018, , .		2

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109	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
110	Fully integrated remote radio head and improved data transmission for inductive power transfer systems. , 2018, , .		0
111	Microstrip-to-waveguide transition in planar form using a substrate integrated waveguide. , 2018, , .		7
112	Evaluation of cellular standards for low data rate applications regarding power consumption and timing parameters. , 2018, , .		4
113	Circuit design for a radiation tolerant 2.4 GHz synthesizer based on COTS components. , 2018, , .		1
114	A flexible mixed-signal image processing pipeline using 3D chip stacks. Journal of Real-Time Image Processing, 2018, 14, 517-534.	2.2	1
115	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
116	Fusion of Nonintrusive Environmental Sensors for Occupancy Detection in Smart Homes. IEEE Internet of Things Journal, 2018, 5, 2343-2352.	5.5	44
117	Novel Approach for Virtual Coupling of Trains Using Different Modulation and Coding Schemes. , 2018, , .		7
118	5G mm-Wave Stacked Class AB Power Amplifier in 45 nm PD-SOI CMOS. , 2018, , .		8
119	A Scalable 77 GHz Massive MIMO FMCW Radar by Cascading Fully-Integrated Transceivers. , 2018, , .		20
120	Electro-Thermal Modeling of TCSAW Filter. , 2018, , .		3
121	Concepts for a Monostatic Radar Transceiver Front-end in eWLB Package with Off-Chip QuasiCirculator for 60 GHz. , 2018, , .		3
122	Evaluation of ISAR-Based Autofocus Methods for Estimation of True-Speed-Over-Ground Using a 24 GHz FMCW-Radar. , 2018, , .		1
123	An Accurate Free Space Method for Material Characterization in W- Band Using Material Samples with Two Different Thicknesses. , 2018, , .		4
124	Six-Port Based Multitone and Low-Power Radar System for Waveguide Measurements in Smart Factories. , 2018, , .		5
125	Enhanced GSM Broadcast Receiver Using the Phase Output of a Sub-GHz Transceiver. , 2018, , .		1
126	Performance Analysis of an Ultra Wideband Transceiver for Real-Time Localization. , 2018, , .		2

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127	Wafer Level Package Integrated Antenna Concepts for Circular Polarization. , 2018, , .		1
128	Robust Correlation based True-Speed-over-Ground Measurement System employing a FMCW Radar. , 2018, , .		7
129	BATS: Adaptive Ultra Low Power Sensor Network for Animal Tracking. Sensors, 2018, 18, 3343.	2.1	33
130	Radar-Based Heart Sound Detection. Scientific Reports, 2018, 8, 11551.	1.6	99
131	Contactless person identification using cardiac radar signals. , 2018, , .		10
132	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
133	Reader Architectures for Wireless Surface Acoustic Wave Sensors. Sensors, 2018, 18, 1734.	2.1	38
134	A review on six-port radar and its calibration techniques. , 2018, , .		7
135	Influence of train interior on train-onboard communication. , 2018, , .		2
136	Enhanced mobile node design for small size animal borne wireless sensor nodes with encounter detection and localization. , 2018, , .		4
137	The Influence of Interference Sources on a Magnetic Field-Based Current Sensor for Multiconductor Measurement. IEEE Sensors Journal, 2018, 18, 6782-6787.	2.4	29
138	High-Speed Resonant Surface Acoustic Wave Instrumentation Based on Instantaneous Frequency Measurement. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 974-984.	2.4	25
139	Crosstalk in Circular Arrays of Magnetic Sensors for Current Measurement. IEEE Transactions on Industrial Electronics, 2017, 64, 4903-4909.	5.2	57
140	Assessment of Transmitter Initiated Wake-Up Radio Versus Pure Wake-Up Receiver Decoding. IEEE Microwave and Wireless Components Letters, 2017, 27, 413-415.	2.0	2
141	Design of a 24 GHz reconfigurable transmitarray element with continuous phase range. , 2017, , .		6
142	Increased data rate using higher-order digital modulation for simultaneous inductive data and power transfer systems. , 2017, , .		3
143	SDR implementation of an adaptive low-latency IEEE 802.11p transmitter system for real-time wireless applications. , 2017, , .		2
144	A direct RF-to-baseband quadrature subsampling receiver using a low cost ADC. , 2017, , .		0

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145	Detector nonlinearity in Six-port radar. , 2017, , .		7
146	Segmental polynomial approximation based phase error correction for precise near field displacement measurements using Six-Port microwave interferometers. , 2017, , .		15
147	RSSI-based localization with minimal infrastructure using multivariate statistic techniques. , 2017, , .		4
148	Dimensioning and comparison of common compensation topologies for IPT systems. , 2017, , .		2
149	Comparison of laser safe scanning patterns for second generation LiDAR deflection units. , 2017, , .		1
150	Advanced template matching algorithm for instantaneous heartbeat detection using continuous wave radar systems. , 2017, , .		26
151	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
152	Concentration and temperature dependent selectivity of the LTCC porosification process with phosphoric acid. Ceramics International, 2017, 43, 714-721.	2.3	6
153	Local Pulse Wave Detection Using Continuous Wave Radar Systems. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2017, 1, 81-89.	2.3	34
154	In-line material characterization sensors operating at 10GHz and 77GHz. , 2017, , .		3
155	Smart communication and relative localization system for firefighters and rescuers. , 2017, , .		10
156	Error compensation of the temperature influence on radar based displacement measurements. , 2017, , .		3
157	Zero-bias schottky power detector design for six-port based radar systems. , 2017, , .		5
158	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
159	Lifetime enhancement of disaster recovery systems based on IEEE 802.11s wireless mesh networks using a sleep-wake algorithm with minimum number of neighbors. , 2017, , .		0
160	A Survey on Analog-to-Digital Converter Performance with Respect to Ionizing Radiation. , 2017, , .		1
161	Mixer assisted interferometric six-port system for accurate distance measurements. , 2017, , .		3
162	A Coplanar Waveguide Resonator Based In-Line Material Characterization Sensor for Bulk and Metallized Dielectrics. Frequenz, 2017, 71, .	0.6	4

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163	A novel approach for reliable communications within inductive power transfer systems. , 2016, , .		8
164	Frequency separation stage design for a reliable data link in an IPT system for electric vehicles. , 2016, , .		1
165	A fast and precise Six-Port-based IFM technique for wireless resonant SAW sensing. , 2016, , .		2
166	Making real-time hardware-in-the-loop testing of automotive electronic control units wireless. , 2016, , .		2
167	Precise and fast frequency determination of resonant SAW sensors by a low-cost Six-Port interferometer. , 2016, , .		5
168	Enhancing the real-time performance of a wireless hardware-in-the-loop test system in ISM bands. , 2016, , .		0
169	Instantaneous heartbeat detection using a cross-correlation based template matching for continuous wave radar systems. , 2016, , .		10
170	Implementation of simultaneous energy and data transfer in a contactless connector. , 2016, , .		13
171	Digital phase correction for multiplexed ADCs in low-cost Six-Port interferometers. , 2016, , .		5
172	Low latency evaluation of an adaptive industrial wireless communications system for ISM bands. , 2016, , .		5
173	Improved calibration procedure for six-port based precise displacement measurements. , 2016, , .		12
174	A grounded coplanar waveguide resonator based in-line material characterization sensor. , 2016, , .		2
175	Reliable data link for power transfer control in an inductive charging system for electric vehicles. , 2016, , .		5
176	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
177	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
178	Industrial mmWave Radar Sensor in Embedded Wafer-Level BGA Packaging Technology. IEEE Sensors Journal, 2016, , 1-1.	2.4	29
179	A planar reconfigurable focal plane array antenna for 24 GHz. , 2016, , .		0
180	A Tone Mapping algorithm suited for analog-signal real-time image processing. , 2016, , .		3

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181	The MTT-S Strategic Planning Committee-Addressing Future Needs [MTT World]. IEEE Microwave Magazine, 2016, 17, 79-79.	0.7	0
182	A low power CMOS transmitter with Class-E power amplifiers for positioning application in multi-band. , 2016, , .		4
183	The influence of rain on small aperture LiDAR sensors. , 2016, , .		15
184	Let's Make Them Cognitive Cognitive Radio Technology Applied to Professional Wireless Microphone Systems. IEEE Microwave Magazine, 2016, 17, 70-78.	0.7	4
185	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
186	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
187	Intelligent signal processing routine for instantaneous heart rate detection using a Six-Port microwave interferometer. , 2015, , .		8
188	In-containment signal conditioning and transmission via power lines within high dose rate areas of nuclear power plants. , 2015, , .		0
189	A CMOS image sensor with analog pre-processing capability suitable for smart camera applications. , 2015, , .		5
190	ADC depending limitations for Six-Port based distance measurement systems. , 2015, , .		6
191	Surface velocity estimation of fluids using millimetre-wave radar. , 2015, , .		6
192	Ultra-short-range, precise displacement measurement setup with a near field slot-line antenna and a dedicated spiral calibration. , 2015, , .		10
193	A 2â€“30 GHz multi-octave planar microwave six-port for reflectometry applications. , 2015, , .		2
194	100 GHz reflectometer for sensitivity analysis of MEMS sensors comprising an intermediate frequency Six-port receiver. , 2015, , .		6
195	A low power 24 GHz radar system for occupancy monitoring. , 2015, , .		12
196	A High-Sensitivity Radar System Featuring Low Weight and Power Consumption. IEEE Microwave Magazine, 2015, 16, 99-105.	0.7	10
197	Low-weight wireless sensor network for encounter detection of bats. , 2015, , .		7
198	8 channel MIMO long range radar concept for angular estimation in multi target scenarios. , 2015, , .		1

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199	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
200	Underwater interferometric radar sensor for distance and vibration measurement. , 2015, , .		3
201	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
202	A 70 GHz bandwidth low-power active balun employing common-collector resistive feedback in 0.35 μm bipolar SiGe technology. , 2014, , .		3
203	Multi-octave planar microwave slot-coupled directional coupler up to 28 GHz with novel phase velocity compensation. , 2014, , .		2
204	Open-ended dielectric-filled waveguide antenna for underwater usage. , 2014, , .		6
205	A permittivity characterization method by detuned ring-resonators for bulk materials up to 110 GHz. , 2014, , .		9
206	A simplified equivalent model for microwave characteristics of porosified LTCC. , 2014, , .		1
207	Signal detection and cooperative sensing with sensor nodes with limited dynamic. , 2014, , .		2
208	I/Q imbalance compensation for Six-port interferometers in radar applications. , 2014, , .		29
209	Integrated RF transformer and power combiner design in 150nm CMOS process. , 2014, , .		3
210	Open-ended dielectric-filled waveguide antenna for underwater usage. , 2014, , .		1
211	A 2-watt, 0.15- μm GaAs pHEMT stacked amplifier at 22 GHz. , 2014, , .		1
212	On fast chirp modulations and compressed sensing for automotive radar applications. , 2014, , .		35
213	Selftest strategies for microwave interferometry for high-precision industrial distance measurements. , 2014, , .		1
214	Six-Port based direction finding and ranging. , 2014, , .		3
215	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
216	Target simulator concept for chirp modulated 77 GHz automotive radar sensors. , 2014, , .		23

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