Fabian Michler

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7989533/publications.pdf

Version: 2024-02-01

46	491	759233	839539
papers	citations	12 h-index	18 g-index

46	46	46	383
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Digital Frequency Control Loop for Continuous-Wave and Stepped-Frequency Radars. , 2022, , .		0
2	Evaluation of Embedded Algorithms for a Six-Port-Based Frequency Measurement System. , 2022, , .		0
3	Implementation and Assessment of a Radar Based True-Speed-Over-Ground Estimation Approach Utilizing Complex-Valued Correlation. , 2022, , .		2
4	Micrometer Sensing With Microwaves: Precise Radar Systems for Innovative Measurement Applications. IEEE Journal of Microwaves, 2021, 1, 202-217.	6.5	15
5	Postprocessing and Evaluation for a Radar-Based True-Speed-Over-Ground Estimation System. IEEE Microwave and Wireless Components Letters, 2021, 31, 1251-1254.	3.2	3
6	Contactless analysis of heart rate variability during cold pressor test using radar interferometry and bidirectional LSTM networks. Scientific Reports, 2021, 11, 3025.	3.3	19
7	Miniaturized Hybrid Frequency Reader for Contactless Measurement Scenarios Using Resonant Surface Acoustic Wave Sensors. Sensors, 2021, 21, 2367.	3.8	5
8	A Digital Correction Method for Increased Dynamic Range in Interferometric Six-Port Radars. IEEE Microwave and Wireless Components Letters, 2021, 31, 997-1000.	3.2	1
9	Automatic Signal Quality Index Determination of Radar-Recorded Heart Sound Signals Using Ensemble Classification. IEEE Transactions on Biomedical Engineering, 2020, 67, 773-785.	4.2	34
10	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.	0.8	4
11	An Automatic Gain and Offset Control Circuit for DC-Coupled Continuous-Wave Radar Systems. , 2020, , .		2
12	A dataset of clinically recorded radar vital signs with synchronised reference sensor signals. Scientific Data, 2020, 7, 291.	5.3	41
13	Continuous In-Bed Monitoring of Vital Signs Using a Multi Radar Setup for Freely Moving Patients. Sensors, 2020, 20, 5827.	3.8	18
14	On the Impact of System Nonlinearities in Continuous-Wave Radar Systems for Vital Parameter Sensing. , 2020, , .		2
15	A dataset of radar-recorded heart sounds and vital signs including synchronised reference sensor signals. Scientific Data, 2020, 7, 50.	5.3	28
16	Multilayer Topology Optimization of Wideband SIW-to-Waveguide Transitions. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1326-1339.	4.6	23
17	An Ultra Broadband Multi-Tone Six-Port Radar for Distance Measurements in K-Band Waveguides. , 2020, , .		2
18	Rotary Coupler in Microstrip Line Design for Data Transmission in the 2.45GHz ISM Band. , 2020, , .		2

#	Article	IF	Citations
19	Design of a Rotary Coupler for Data Transmission on Fast Rotating Mechanical Shafts and Roboter Arms. , 2019, , .		3
20	Design of Planar Microstrip-to-Waveguide Transitions Using Topology Optimization. , 2019, , .		11
21	Respiration Extraction from Radar Heart Sound Measurements. , 2019, 2019, 6533-6536.		1
22	Phased Array Approach for Vehicle-to-Infrastructure Communication in Train Stations. , 2019, , .		0
23	Pulse Wave Velocity Detection Using a 24 GHz Six-Port Based Doppler Radar. , 2019, , .		10
24	A Clinically Evaluated Interferometric Continuous-Wave Radar System for the Contactless Measurement of Human Vital Parameters. Sensors, 2019, 19, 2492.	3.8	24
25	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.	4.6	18
26	Lowâ€power contactless LCâ€tank based respiratory sensor. Electronics Letters, 2019, 55, 304-306.	1.0	2
27	In-Situ-Linearization for Instantaneous Frequency Measurement Systems. , 2019, , .		3
28	Frequency Readjustment of Excitation Signals for Resonant Surface Acoustic Wave Sensors in the 2.45 GHz ISM Band. , 2019, , .		2
29	(Micro)Metering with Microwaves: A Low-Cost, Low-Power, High-Precision Radar System. IEEE Microwave Magazine, 2019, 20, 91-97.	0.8	9
30	Fast dual-synthesizer for six-port in-situ linearization in the 2.4 GHz ISM-band. , 2018, , .		3
31	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.	0.8	15
32	Low-power frequency synthesizer for multi-tone six-port radar. , 2018, , .		1
33	Microstrip-to-waveguide transition in planar form using a substrate integrated waveguide. , 2018, , .		7
34	Novel Approach for Virtual Coupling of Trains Using Different Modulation and Coding Schemes. , 2018, , .		7
35	Support Vector Machine-Based Instantaneous Presence Detection for Continuous Wave Radar Systems. , 2018, , .		2
36	A Planar 24 GHz Switched-Beam Antenna Based on PIN Diodes for Remote Sensing Applications. , 2018, , .		2

#	Article	IF	Citations
37	Contactless Carotid Pulse Measurement Using Continuous Wave Radar. , 2018, , .		4
38	A Resonant Substrate Integrated Waveguide Measurement System for True Relative Permittivity Extraction of PCB Materials up to 90 GHz. , 2018, , .		2
39	Six-Port Based Multitone and Low-Power Radar System for Waveguide Measurements in Smart Factories. , 2018, , .		5
40	Performance Analysis of an Ultra Wideband Transceiver for Real- Time Localization. , 2018, , .		2
41	Radar-Based Heart Sound Detection. Scientific Reports, 2018, 8, 11551.	3.3	99
42	A contactless system for continuous vital sign monitoring in palliative and intensive care. , 2018, , .		12
43	Local Pulse Wave Detection Using Continuous Wave Radar Systems. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2017, 1, 81-89.	3.4	34
44	Error compensation of the temperature influence on radar based displacement measurements. , 2017, , .		3
45	Zero-bias schottky power detector design for six-port based radar systems. , 2017, , .		5
46	Calibration scheme for microwave biosensors using exclusively liquid calibration standards. , 2016, , .		4