

Fabian Michler

List of Publications by Year in descending order

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

Version: 2024-02-01

46
papers

491
citations

759233

12
h-index

839539

18
g-index

46
all docs

46
docs citations

46
times ranked

383
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Radar-Based Heart Sound Detection. Scientific Reports, 2018, 8, 11551. | 3.3 | 99 |
| 2 | A dataset of clinically recorded radar vital signs with synchronised reference sensor signals. Scientific Data, 2020, 7, 291. | 5.3 | 41 |
| 3 | 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 |
| 4 | 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 |
| 5 | A dataset of radar-recorded heart sounds and vital signs including synchronised reference sensor signals. Scientific Data, 2020, 7, 50. | 5.3 | 28 |
| 6 | A Clinically Evaluated Interferometric Continuous-Wave Radar System for the Contactless Measurement of Human Vital Parameters. Sensors, 2019, 19, 2492. | 3.8 | 24 |
| 7 | Multilayer Topology Optimization of Wideband SIW-to-Waveguide Transitions. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1326-1339. | 4.6 | 23 |
| 8 | 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 |
| 9 | 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 |
| 10 | Continuous In-Bed Monitoring of Vital Signs Using a Multi Radar Setup for Freely Moving Patients. Sensors, 2020, 20, 5827. | 3.8 | 18 |
| 11 | 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 |
| 12 | Micrometer Sensing With Microwaves: Precise Radar Systems for Innovative Measurement Applications. IEEE Journal of Microwaves, 2021, 1, 202-217. | 6.5 | 15 |
| 13 | A contactless system for continuous vital sign monitoring in palliative and intensive care. , 2018, , . | | 12 |
| 14 | Design of Planar Microstrip-to-Waveguide Transitions Using Topology Optimization. , 2019, , . | | 11 |
| 15 | Pulse Wave Velocity Detection Using a 24 GHz Six-Port Based Doppler Radar. , 2019, , . | | 10 |
| 16 | (Micro)Metering with Microwaves: A Low-Cost, Low-Power, High-Precision Radar System. IEEE Microwave Magazine, 2019, 20, 91-97. | 0.8 | 9 |
| 17 | Microstrip-to-waveguide transition in planar form using a substrate integrated waveguide. , 2018, , . | | 7 |
| 18 | Novel Approach for Virtual Coupling of Trains Using Different Modulation and Coding Schemes. , 2018, , . | | 7 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Zero-bias schottky power detector design for six-port based radar systems. , 2017, , . | | 5 |
| 20 | Six-Port Based Multitone and Low-Power Radar System for Waveguide Measurements in Smart Factories. , 2018, , . | | 5 |
| 21 | Miniaturized Hybrid Frequency Reader for Contactless Measurement Scenarios Using Resonant Surface Acoustic Wave Sensors. Sensors, 2021, 21, 2367. | 3.8 | 5 |
| 22 | Calibration scheme for microwave biosensors using exclusively liquid calibration standards. , 2016, , . | | 4 |
| 23 | Contactless Carotid Pulse Measurement Using Continuous Wave Radar. , 2018, , . | | 4 |
| 24 | 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 |
| 25 | Error compensation of the temperature influence on radar based displacement measurements. , 2017, , . | | 3 |
| 26 | Fast dual-synthesizer for six-port in-situ linearization in the 2.4 GHz ISM-band. , 2018, , . | | 3 |
| 27 | Design of a Rotary Coupler for Data Transmission on Fast Rotating Mechanical Shafts and Roboter Arms. , 2019, , . | | 3 |
| 28 | In-Situ-Linearization for Instantaneous Frequency Measurement Systems. , 2019, , . | | 3 |
| 29 | 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 |
| 30 | Support Vector Machine-Based Instantaneous Presence Detection for Continuous Wave Radar Systems. , 2018, , . | | 2 |
| 31 | A Planar 24 GHz Switched-Beam Antenna Based on PIN Diodes for Remote Sensing Applications. , 2018, , . | | 2 |
| 32 | A Resonant Substrate Integrated Waveguide Measurement System for True Relative Permittivity Extraction of PCB Materials up to 90 GHz. , 2018, , . | | 2 |
| 33 | Performance Analysis of an Ultra Wideband Transceiver for Real-Time Localization. , 2018, , . | | 2 |
| 34 | Low-power contactless LC-tank based respiratory sensor. Electronics Letters, 2019, 55, 304-306. | 1.0 | 2 |
| 35 | Frequency Readjustment of Excitation Signals for Resonant Surface Acoustic Wave Sensors in the 2.45 GHz ISM Band. , 2019, , . | | 2 |
| 36 | An Automatic Gain and Offset Control Circuit for DC-Coupled Continuous-Wave Radar Systems. , 2020, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | On the Impact of System Nonlinearities in Continuous-Wave Radar Systems for Vital Parameter Sensing. , 2020, , . | | 2 |
| 38 | An Ultra Broadband Multi-Tone Six-Port Radar for Distance Measurements in K-Band Waveguides. , 2020, , . | | 2 |
| 39 | Rotary Coupler in Microstrip Line Design for Data Transmission in the 2.45GHz ISM Band. , 2020, , . | | 2 |
| 40 | Implementation and Assessment of a Radar Based True-Speed-Over-Ground Estimation Approach Utilizing Complex-Valued Correlation. , 2022, , . | | 2 |
| 41 | Low-power frequency synthesizer for multi-tone six-port radar. , 2018, , . | | 1 |
| 42 | Respiration Extraction from Radar Heart Sound Measurements. , 2019, 2019, 6533-6536. | | 1 |
| 43 | 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 |
| 44 | Phased Array Approach for Vehicle-to-Infrastructure Communication in Train Stations. , 2019, , . | | 0 |
| 45 | Digital Frequency Control Loop for Continuous-Wave and Stepped-Frequency Radars. , 2022, , . | | 0 |
| 46 | Evaluation of Embedded Algorithms for a Six-Port-Based Frequency Measurement System. , 2022, , . | | 0 |