

# Thomas Ussmueller

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

318  
citations

1307594

7  
h-index

1125743

13  
g-index

67  
all docs

67  
docs citations

67  
times ranked

372  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tag, You're It: Ranging and Finding via RFID Technology. IEEE Microwave Magazine, 2013, 14, 36-46.	0.8	51
2	A multistandard HF/ UHF-RFID-tag with integrated sensor interface and localization capability. , 2012, , .		37
3	Remote Powered Medical Implants for Telemonitoring. Proceedings of the IEEE, 2014, 102, 1811-1832.	21.3	30
4	Software-Defined RFID Readers: Wireless Reader Testbeds Exploiting Software-Defined Radios for Enhancements in UHF RFID Systems. IEEE Microwave Magazine, 2021, 22, 46-56.	0.8	12
5	Numerical Optimization of a Fully Cross-Coupled Rectifier Circuit for Wireless Passive Ultra Low Power Sensor Nodes. Sensors, 2019, 19, 4527.	3.8	10
6	Roundtrip-Time-of-Flight based localization of passive multi-standard RFID-tags. , 2012, , .		9
7	A compact analog active time delay line using SiGe BiCMOS technology. , 2013, , .		9
8	An ECG simulator with a novel ECG profile for physiological signals. Journal of Medical Engineering and Technology, 2018, 42, 501-509.	1.4	9
9	Increasing Imaging Resolution by Non-Regular Sampling and Joint Sparse Deconvolution and Extrapolation. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 308-322.	8.3	9
10	Ultra-wideband active array imaging for biomedical diagnostics. , 2012, , .		8
11	A highly-integrated fractional-N synthesizer for FMCW radar. , 2008, , .		7
12	A Clock Synchronization for M-Sequence-Based Ultra-Wideband Systems. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 3549-3561.	4.6	7
13	A highly reconfigurable RF-DPLL phase modulator for polar transmitters in multi-band/multi-standard cellular RFICs. , 2017, , .		7
14	Battery-less UHF RFID controlled transistor switch for Internet of Things applications " A feasibility study. , 2018, , .		7
15	Evolutionary Optimization of Asymmetrical Pixelated Antennas Employing Shifted Cross Shaped Elements for UHF RFID. Electronics (Switzerland), 2020, 9, 1856.	3.1	7
16	A Memoryless Semi-Physical Power Amplifier Behavioral Model Based on the Correlation Between AM"AM and AM"PM Distortions. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 1826-1835.	4.6	6
17	Frequency synthesizer for digital satellite radio receiving systems. , 2014, , .		5
18	A CMOS image sensor with analog pre-processing capability suitable for smart camera applications. , 2015, , .		5

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19	A Highly Reconfigurable RF-DPLL Phase Modulator for Polar Transmitters in Cellular RFICs. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2618-2627.	4.6	5
20	Improvements of wireless communication and energy harvesting aspects for implantable sensor interfaces by using the Split Frequencies Concept. , 2011, , .		4
21	A classification and comparative overview of state-of-the-art analog linearization techniques for integrated CMOS power amplifiers. , 2012, , .		4
22	SAW and CMOS RFID transponder-based wireless systems and their applications. , 2012, , .		4
23	An extension of power amplifier behavioral models for optimizing battery current at system level. , 2013, , .		4
24	Challenges in RF-DPLL design for wideband phase modulation supporting SC-FDMA in LTE uplink. , 2014, , .		4
25	A low power CMOS transmitter with Class-E power amplifiers for positioning application in multi-band. , 2016, , .		4
26	Spectral Efficiency Increase for Passive Backscatter Communication Based on Discrete Pulse Shaping. IEEE Access, 2018, 6, 50875-50881.	4.2	4
27	UHF RFID Prototyping Platform for ISO 29167 Decryption Based on an SDR. Sensors, 2019, 19, 2220.	3.8	4
28	A CMOS RF front-end IC for multi antenna diversity applications in the S-band. , 2012, , .		3
29	A CMOS divider family for high frequency wireless localization systems. , 2012, , .		3
30	A Tone Mapping algorithm suited for analog-signal real-time image processing. , 2016, , .		3
31	Remote Control System for Battery-Assisted Devices with 16 nW Standby Consumption. Sensors, 2019, 19, 975.	3.8	3
32	Concept for electronic calibration of A CMOS voltage reference. , 2010, , .		2
33	A state-based power estimation methodology at system level for integrated RF front-ends. , 2011, , .		2
34	A MIM-cap free digitally tunable NMOS Pi-network. , 2013, , .		2
35	Low Power 24 GHz ad hoc Networking System Based on TDOA for Indoor Localization. ISPRS International Journal of Geo-Information, 2013, 2, 1122-1135.	2.9	2
36	A cross correlation based clock synchronization up to 10GHz for ultra-wideband sensing systems. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
37	An inductor-less LTE receiver using an 8-path filter for TX leakage suppression. , 2014, , .		2
38	Analog computation methods with the help of analog and pseudo-digital carry signals. , 2015, , .		2
39	Digitally controlled oscillator gain estimation for RF-DPLLs in 4G LTE polar transmitters. , 2016, , .		2
40	A Time Dependent Temperature Compensated Limiter for Passive Differential UHF RFID. , 2021, , .		2
41	Implementation of a digital trim scheme for SAR ADCs. Advances in Radio Science, 0, 11, 227-230.	0.7	2
42	A 9.7 mW 0.13 &#x00B5;m CMOS PLL for use in wireless sensor nodes. , 2011, , .		1
43	High precision wireless synchronization receiver for M-sequence UWB Radio systems. , 2012, , .		1
44	An integrated switched injection-locked oscillator for pulsed angle modulated ultra wideband communication and radar systems. , 2012, , .		1
45	A low power divider for high frequency FMCW based localization systems. , 2012, , .		1
46	Implantable antenna for medical sensor platforms. , 2012, , .		1
47	Remote powered medical implants. , 2013, , .		1
48	A comparative overview of high power handling CMOS switches and their recent applications in RF front ends. , 2013, , .		1
49	A novel power amplifier behavioral model for improving the linearity-efficiency tradeoff. , 2013, , .		1
50	A comparison of state-of-the-art efficiency enhancement techniques of fully integrated CMOS power amplifiers for handset LTE applications. , 2013, , .		1
51	A double bandpass N-path filter for LTE carrier aggregation receivers in 28nm CMOS. , 2014, , .		1
52	Technologies for RFID sensors and sensor tags. , 2014, , 76-115.		1
53	A flexible mixed-signal image processing pipeline using 3D chip stacks. Journal of Real-Time Image Processing, 2018, 14, 517-534.	3.5	1
54	A Nano-Power 0.5 V Event-Driven Digital-LDO with Fast Start-Up Burst Oscillator for SoC-IoT. Journal of Low Power Electronics and Applications, 2020, 10, 41.	2.0	1

#	ARTICLE	IF	CITATIONS
55	Battery-Less ECG Embedded in Smart Textiles. , 2022, , .		1
56	Phase-locked loop based frequency synthesizer with chirp generation for FMCW secondary radar systems. , 2010, , .		0
57	A digital trimmable comparator for high precision ADCs in wireless sensor nodes. , 2011, , .		0
58	Time-efficient adjacent channel power ratio simulation utilizing Overlap-add signal decomposition for UMTS power amplifiers. , 2012, , .		0
59	An integrated SiGe bipolar VCO with linearized tuning behavior and ultra-wide tuning range for UWB FMCW local positioning systems. , 2012, , .		0
60	A 20-Gbps low jitter analog clock recovery circuit for ultra-wide band Radio systems. , 2014, , .		0
61	A semi-physical power amplifier behavioral model capable of predicting gain expansion effects. , 2014, , .		0
62	Ultra wide band power amplifier for miniaturized antennas. , 2014, , .		0
63	A Receiver for Inductive Ear-to-Ear Communication. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5151-5155.	4.6	0
64	A novel measurement strategy to evaluate the human head as a transition medium for inductive ear-to-ear communication. Biomedizinische Technik, 2019, 64, 233-241.	0.8	0
65	Advancing Ultrahigh-Frequency RFID Through Digital Signal Processing [From the Guest Editors' Desk]. IEEE Microwave Magazine, 2021, 22, 16-17.	0.8	0
66	A Nano-Power Self-Clocked D-LDO for RF Energy Harvesting. , 2021, , .		0
67	An e2e Communication System Operating in the Electromagnetic Near Field. , 2022, , .		0