

# Thomas Ussmueller

## List of Publications by Year in descending order

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67  
papers

318  
citations

1307594

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h-index

1125743

13  
g-index

67  
all docs

67  
docs citations

67  
times ranked

372  
citing authors

#	ARTICLE	IF	CITATIONS
1	Battery-Less ECG Embedded in Smart Textiles. , 2022, , .		1
2	An e2e Communication System Operating in the Electromagnetic Near Field. , 2022, , .		0
3	Advancing Ultrahigh-Frequency RFID Through Digital Signal Processing [From the Guest Editors' Desk]. IEEE Microwave Magazine, 2021, 22, 16-17.	0.8	0
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	A Nano-Power Self-Clocked D-LDO for RF Energy Harvesting. , 2021, , .		0
6	A Time Dependent Temperature Compensated Limiter for Passive Differential UHF RFID. , 2021, , .		2
7	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
8	Evolutionary Optimization of Asymmetrical Pixelated Antennas Employing Shifted Cross Shaped Elements for UHF RFID. Electronics (Switzerland), 2020, 9, 1856.	3.1	7
9	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
10	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
11	Numerical Optimization of a Fully Cross-Coupled Rectifier Circuit for Wireless Passive Ultra Low Power Sensor Nodes. Sensors, 2019, 19, 4527.	3.8	10
12	UHF RFID Prototyping Platform for ISO 29167 Decryption Based on an SDR. Sensors, 2019, 19, 2220.	3.8	4
13	Remote Control System for Battery-Assisted Devices with 16 nW Standby Consumption. Sensors, 2019, 19, 975.	3.8	3
14	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
15	Battery-less UHF RFID controlled transistor switch for Internet of Things applications – A feasibility study. , 2018, , .		7
16	A flexible mixed-signal image processing pipeline using 3D chip stacks. Journal of Real-Time Image Processing, 2018, 14, 517-534.	3.5	1
17	An ECG simulator with a novel ECG profile for physiological signals. Journal of Medical Engineering and Technology, 2018, 42, 501-509.	1.4	9
18	A Receiver for Inductive Ear-to-Ear Communication. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5151-5155.	4.6	0

#	ARTICLE	IF	CITATIONS
19	Spectral Efficiency Increase for Passive Backscatter Communication Based on Discrete Pulse Shaping. IEEE Access, 2018, 6, 50875-50881.	4.2	4
20	A highly reconfigurable RF-DPLL phase modulator for polar transmitters in multi-band/multi-standard cellular RFICs. , 2017, , .		7
21	Digitally controlled oscillator gain estimation for RF-DPLLs in 4G LTE polar transmitters. , 2016, , .		2
22	A Tone Mapping algorithm suited for analog-signal real-time image processing. , 2016, , .		3
23	A low power CMOS transmitter with Class-E power amplifiers for positioning application in multi-band. , 2016, , .		4
24	A CMOS image sensor with analog pre-processing capability suitable for smart camera applications. , 2015, , .		5
25	A Memoryless Semi-Physical Power Amplifier Behavioral Model Based on the Correlation Between AM and PM Distortions. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 1826-1835.	4.6	6
26	Analog computation methods with the help of analog and pseudo-digital carry signals. , 2015, , .		2
27	Challenges in RF-DPLL design for wideband phase modulation supporting SC-FDMA in LTE uplink. , 2014, , .		4
28	A Clock Synchronization for M-Sequence-Based Ultra-Wideband Systems. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 3549-3561.	4.6	7
29	A 20-Gbps low jitter analog clock recovery circuit for ultra-wide band Radio systems. , 2014, , .		0
30	A semi-physical power amplifier behavioral model capable of predicting gain expansion effects. , 2014, , .		0
31	A cross correlation based clock synchronization up to 10GHz for ultra-wideband sensing systems. , 2014, , .		2
32	Ultra wide band power amplifier for miniaturized antennas. , 2014, , .		0
33	Remote Powered Medical Implants for Telemonitoring. Proceedings of the IEEE, 2014, 102, 1811-1832.	21.3	30
34	A double bandpass N-path filter for LTE carrier aggregation receivers in 28nm CMOS. , 2014, , .		1
35	Frequency synthesizer for digital satellite radio receiving systems. , 2014, , .		5
36	An inductor-less LTE receiver using an 8-path filter for TX leakage suppression. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
37	Technologies for RFID sensors and sensor tags. , 2014, , 76-115.		1
38	Tag, You're It: Ranging and Finding via RFID Technology. IEEE Microwave Magazine, 2013, 14, 36-46.	0.8	51
39	Remote powered medical implants. , 2013, , .		1
40	An extension of power amplifier behavioral models for optimizing battery current at system level. , 2013, , .		4
41	A MIM-cap free digitally tunable NMOS Pi-network. , 2013, , .		2
42	A compact analog active time delay line using SiGe BiCMOS technology. , 2013, , .		9
43	A comparative overview of high power handling CMOS switches and their recent applications in RF front ends. , 2013, , .		1
44	A novel power amplifier behavioral model for improving the linearity-efficiency tradeoff. , 2013, , .		1
45	A comparison of state-of-the-art efficiency enhancement techniques of fully integrated CMOS power amplifiers for handset LTE applications. , 2013, , .		1
46	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
47	High precision wireless synchronization receiver for M-sequence UWB Radio systems. , 2012, , .		1
48	Ultra-wideband active array imaging for biomedical diagnostics. , 2012, , .		8
49	Time-efficient adjacent channel power ratio simulation utilizing Overlap-add signal decomposition for UMTS power amplifiers. , 2012, , .		0
50	A multistandard HF/ UHF-RFID-tag with integrated sensor interface and localization capability. , 2012, , .		37
51	An integrated SiGe bipolar VCO with linearized tuning behavior and ultra-wide tuning range for UWB FMCW local positioning systems. , 2012, , .		0
52	An integrated switched injection-locked oscillator for pulsed angle modulated ultra wideband communication and radar systems. , 2012, , .		1
53	A low power divider for high frequency FMCW based localization systems. , 2012, , .		1
54	A classification and comparative overview of state-of-the-art analog linearization techniques for integrated CMOS power amplifiers. , 2012, , .		4

#	ARTICLE	IF	CITATIONS
55	Roundtrip-Time-of-Flight based localization of passive multi-standard RFID-tags. , 2012, , .		9
56	A CMOS RF front-end IC for multi antenna diversity applications in the S-band. , 2012, , .		3
57	SAW and CMOS RFID transponder-based wireless systems and their applications. , 2012, , .		4
58	A CMOS divider family for high frequency wireless localization systems. , 2012, , .		3
59	Implantable antenna for medical sensor platforms. , 2012, , .		1
60	A digital trimmable comparator for high precision ADCs in wireless sensor nodes. , 2011, , .		0
61	Improvements of wireless communication and energy harvesting aspects for implantable sensor interfaces by using the Split Frequencies Concept. , 2011, , .		4
62	A state-based power estimation methodology at system level for integrated RF front-ends. , 2011, , .		2
63	A 9.7 mW 0.13 $\mu\text{m}$ CMOS PLL for use in wireless sensor nodes. , 2011, , .		1
64	Concept for electronic calibration of A CMOS voltage reference. , 2010, , .		2
65	Phase-locked loop based frequency synthesizer with chirp generation for FMCW secondary radar systems. , 2010, , .		0
66	A highly-integrated fractional-N synthesizer for FMCW radar. , 2008, , .		7
67	Implementation of a digital trim scheme for SAR ADCs. Advances in Radio Science, 0, 11, 227-230.	0.7	2