

# Wilfried Uhring

## List of Publications by Year in descending order

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Version: 2024-02-01

84  
papers

441  
citations

840776

11  
h-index

996975

15  
g-index

84  
all docs

84  
docs citations

84  
times ranked

354  
citing authors

#	ARTICLE	IF	CITATIONS
1	A low-cost high-repetition-rate picosecond laser diode pulse generator. , 2004, , .		31
2	High-throughput time-correlated single photon counting. Lab on A Chip, 2014, 14, 4338-4343.	6.0	31
3	Very high long-term stability synchroscan streak camera. Review of Scientific Instruments, 2003, 74, 2646-2653.	1.3	24
4	Sizing of Lithium-Ion Battery/Supercapacitor Hybrid Energy Storage System for Forklift Vehicle. Energies, 2020, 13, 4518.	3.1	21
5	Streak camera: a multidetector for diffuse optical tomography. Applied Optics, 2003, 42, 3313.	2.1	19
6	Carbon Dioxide Sensing—Biomedical Applications to Human Subjects. Sensors, 2022, 22, 188.	3.8	18
7	Single snapshot of optical properties image quality improvement using anisotropic two-dimensional windows filtering. Journal of Biomedical Optics, 2019, 24, 1.	2.6	16
8	Towards sensitive, high-throughput, biomolecular assays based on fluorescence lifetime. Methods and Applications in Fluorescence, 2017, 5, 034002.	2.3	15
9	Real-time, wide-field, and quantitative oxygenation imaging using spatiotemporal modulation of light. Journal of Biomedical Optics, 2019, 24, 1.	2.6	14
10	Single snapshot imaging of optical properties using a single-pixel camera: a simulation study. Journal of Biomedical Optics, 2019, 24, 1.	2.6	14
11	Measuring hemoglobin spectra: searching for carbamino-hemoglobin. Journal of Biomedical Optics, 2020, 25, .	2.6	13
12	A New Spatiotemporal CMOS Imager With Analog Accumulation Capability for Nanosecond Low-Power Pulse Detections. IEEE Sensors Journal, 2006, 6, 1200-1208.	4.7	11
13	Study and Influence of Standardized Driving Cycles on the Sizing of Li-Ion Battery / Supercapacitor Hybrid Energy Storage. , 2019, , .		11
14	Streak camera in standard (Bi)CMOS (bipolar complementary metal-oxide-semiconductor) technology. Measurement Science and Technology, 2010, 21, 115203.	2.6	10
15	High-dynamic-range microscope imaging based on exposure bracketing in full-field optical coherence tomography. Optics Letters, 2016, 41, 1313.	3.3	10
16	Real-time optical properties and oxygenation imaging using custom parallel processing in the spatial frequency domain. Biomedical Optics Express, 2019, 10, 3916.	2.9	9
17	A Fully Characterizable Asynchronous Multiphase Delay Generator. IEEE Transactions on Nuclear Science, 2011, 58, 418-425.	2.0	7
18	Detection of defects in a transparent polymer with high resolution tomography using white light scanning interferometry and noise reduction. , 2015, , .		7

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19	A single photon avalanche detector in a 180 nm standard CMOS technology. , 2015, , .		7
20	Comparison of two time-resolved detectors for diffuse optical tomography: photomultiplier tube-time-correlated single photon counting and multichannel streak camera. , 2003, , .		6
21	200 ps FWHM and 100 MHz repetition rate ultrafast gated camera for optical medical functional imaging. Proceedings of SPIE, 2012, , .	0.8	6
22	Evaluation of size influence on performance figures of a single photon avalanche diode fabricated in a 180Ånm standard CMOS technology. Analog Integrated Circuits and Signal Processing, 2016, 89, 69-76.	1.4	6
23	Body-biasing considerations with SPAD FDSOI: advantages and drawbacks. , 2019, , .		6
24	Image processing provides low-frequency jitter correction for synchroscan streak camera temporal resolution enhancement. , 2004, 5457, 245.		5
25	Integrated streak camera in standard (Bi)CMOS technology. , 2010, , .		5
26	Time-gated near-infrared spectroscopic imaging of brain activation: a simulation proof of concept. Proceedings of SPIE, 2011, , .	0.8	5
27	Sub-500-ps Temporal Resolution Streak-Mode Optical Sensor. IEEE Sensors Journal, 2015, 15, 6570-6583.	4.7	5
28	A hybrid time to digital converter based on digital delay locked loop and analog time to amplitude converter. , 2017, , .		5
29	An Ultrafast Active Quenching Active Reset Circuit with 50% SPAD Afterpulsing Reduction in a 28 nm FD-SOI CMOS Technology Using Body Biasing Technique. Sensors, 2021, 21, 4014.	3.8	5
30	12 &#x00D7; 7.14 GS/s rate time-resolved BiCMOS imager. , 2010, , .		4
31	A time-gated near-infrared spectroscopic imaging device for clinical applications.. Proceedings of SPIE, 2013, , .	0.8	4
32	10-ps Resolution hybrid time to digital converter in a 0.18 &#x03BC;m CMOS technology. , 2014, , .		4
33	On the influence of strong magnetic field on MOS transistors. , 2016, , .		4
34	A real time 3D video CMOS sensor with time gated photon counting. , 2017, , .		4
35	An Asynchronous Fixed Priority Arbiter for High throughput Time Correlated Single Photon Counting Systems. , 2018, , .		4
36	A 5 Million Frames Per Second 3D Stacked Image Sensor With In-Pixel Digital Storage. , 2018, , .		4

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37	Design Methodology and Timing Considerations for implementing a TDC on a Cyclone V FPGA Target. , 2020, , .		4
38	<title>Model of an instrumented optoelectronic transmission system in HDL-A and VHDL-AMS</title>. , 1999, , .		3
39	A fast high-resolution CMOS imager for nanosecond light pulse detections. , 2004, 5451, 434.		3
40	A safe, low-cost, and portable instrumentation for bedside time-resolved picosecond near infrared spectroscopy. Proceedings of SPIE, 2009, , .	0.8	3
41	Streak-mode optical sensor in standard BiCMOS technology. , 2011, , .		3
42	A 64 single photon avalanche diode array in 0.18 $\mu\text{m}$ CMOS standard technology with versatile quenching circuit for quick prototyping. , 2012, , .		3
43	Ultrafast Imaging in Standard (Bi)CMOS Technology. , 0, , .		3
44	Signal conditioning circuits for 3D-integrated burst image sensors with on-chip A/D conversion. Proceedings of SPIE, 2015, , .	0.8	3
45	Embedded fluorescence lifetime determination for high throughput real-time droplet sorting with microfluidics. , 2017, , .		3
46	Parallelized Integrated Time-Correlated Photon Counting System for High Photon Counting Rate Applications. , 0, , .		3
47	Comparison of Time Resolved Optical Turbidity Measurements for Water Monitoring to Standard Real-Time Techniques. Sensors, 2021, 21, 3136.	3.8	3
48	Measuring hemoglobin spectra: searching for carbamino-hemoglobin. Journal of Biomedical Optics, 2020, 25, .	2.6	3
49	An Ultrafast Active Quenching Circuit for SPAD in CMOS 28nm FDSOI Technology. , 2020, , .		3
50	Real-time measurement of microscopic surface shape using high-speed cameras with continuously scanning interference microscopy. , 2004, 5458, 101.		2
51	Modular streak camera concept with independent design of electro-optical configuration and electronics. , 2005, , .		2
52	Compatibility of temporal multiplexed spatial light modulator with optical image processing. Optics Communications, 2007, 275, 27-37.	2.1	2
53	Methods for improvement of spatial light modulator image rendering. Optical Engineering, 2009, 48, 034002.	1.0	2
54	A new high-resolution Time-to-Digital Converter concept based on a 128 stage 0.35 $\mu\text{m}$ CMOS delay generator. , 2009, , .		2

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55	Efficiency improvement of high rate integrated time correlated single photon counting systems by incorporating an embedded FIFO. , 2015, , .		2
56	Sub-nanosecond gated photon counting for high spatial resolution CMOS imagers. , 2016, , .		2
57	A Scalable Architecture for Multi Millions Frames per Second CMOS Sensor With Digital Storage. , 2018, , .		2
58	Embedded Fluorescence Lifetime Determination for High-Throughput, Low-Photon-Number Applications. Journal of Signal Processing Systems, 2019, 91, 819-831.	2.1	2
59	A spatiotemporal CMOS imager for nanosecond low power pulse detections. , 0, , .		1
60	A fast CMOS array imager for nanosecond light pulse detection in accumulation mode. , 2004, , .		1
61	Optical implementation of the filtered backprojection algorithm. Optical Engineering, 2007, 46, 108202.	1.0	1
62	Integrated Circuit Architectures for High-Speed Time-Resolved Imaging. , 2010, , .		1
63	Architectures and signal reconstruction methods for nanosecond resolution Integrated Streak Camera in standard CMOS technology. , 2010, , .		1
64	Sub-200 fs rms jitter constant fraction discriminator for streak camera triggering. , 2014, , .		1
65	Impact of laser phase and amplitude noises on streak camera temporal resolution. Review of Scientific Instruments, 2015, 86, 094703.	1.3	1
66	Improvement in measurements of hydroxyapatite layers by hybrid high dynamic range image processing in white-light interferometry. Materials Today: Proceedings, 2017, 4, S36-S43.	1.8	1
67	Modeling the effect of strong magnetic field on n-type MOSFET in strong inversion. , 2018, , .		1
68	Basics of Micro/Nano Fluidics and Biology. Microtechnology and MEMS, 2020, , 7-87.	0.2	1
69	Time-Resolved fluorescence measurement system for real-time high-throughput microfluidic droplet sorting. , 2020, , .		1
70	Design and Characterization of an Asynchronous Fixed Priority Tree Arbiter for SPAD Array Readout. Sensors, 2021, 21, 3949.	3.8	1
71	An Active Quenching Circuit for a Native 3D SPAD Pixel in a 28 nm CMOS FDSOI Technology. , 2021, , .		1
72	Synchroscan streak camera temporal resolution improvement by phase-locked loop technique. , 2003, 4948, 324.		0

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73	FLC-SLM dynamic improvement with temporal multiplexing: application to optical image processing. , 2006, 6183, 390.		0
74	VHDL-AMS models of FLC for spatial light modulator virtual prototyping. , 2006, 6183, 400.		0
75	Capabilities of a new spatiotemporal CMOS imager for nanosecond low power pulse detection. , 2006, 6187, 472.		0
76	Analogue-driven bistable ferroelectric liquid crystals. Analog Integrated Circuits and Signal Processing, 2008, 57, 187-196.	1.4	0
77	Optoelectronic implementation of helical cone-beam computed tomography algorithms. Optical Engineering, 2008, 47, 058201.	1.0	0
78	Performances of a solid streak camera in standard CMOS technology with nanosecond time resolution. Proceedings of SPIE, 2008, , .	0.8	0
79	Electrothermal analysis of 3D integrated ultra-fast image sensor with digital frame storage. , 2015, , .		0
80	High-resolution full-field optical coherence tomography using high dynamic range image processing. Proceedings of SPIE, 2016, , .	0.8	0
81	Introduction to the special issue on IEEE NEWCAS 2017. Analog Integrated Circuits and Signal Processing, 2018, 97, 395-396.	1.4	0
82	Skew Reduction on a long transmission line using multiple local DLLs for high-speed imagery. , 2018, , .		0
83	A High Dynamic Range High Speed Pixel Operating at 100 Million Frames Per Second. , 2020, , .		0
84	Real-time multispectral optical imaging using GPGPU processing. , 2019, , .		0