Joachim Burghartz

List of Publications by Year
in descending order

67 papers	2,285 citations	218677 26 h-index	214800 47 g-index
67 all docs	67 docs citations	67 times ranked	2407 citing authors

#	Article	IF	Citations
1	Subthreshold Swing of 59ÂmV decade^{â^’1} in Nanoscale Flexible Ultralowâ€Voltage Organic Transistors. Advanced Electronic Materials, 2022, 8, .	5.1	18
2	Processing and Chracterisation of an Ultra-thin Image Sensor Chip in flexible Foil System. , 2022, , .		0
3	Physical Modeling of Charge Trapping Effects in GaN/Si Devices and Incorporation in the ASM-HEMT Model. IEEE Journal of the Electron Devices Society, 2021, 9, 748-755.	2.1	9
4	A 12-to-15Âb, 100-to-25ÂkS/s Resolution Reconfigurable, Power Scalable Incremental ADC Using Ultrathin Chips. , 2021, 5, 1-4.		2
5	Ultra-thin Image Sensor Chip Embeded Foil. , 2021, , .		2
6	Model and Simulation of GaN-Based Pressure Sensors for High Temperature Applicationsâ€"Part II: Sensor Design and Simulation. IEEE Sensors Journal, 2021, 21, 20176-20183.	4.7	5
7	Model and Simulation of GaN-Based Pressure Sensors for High Temperature Applicationsâ€"Part I: Physics Based Compact Modeling. IEEE Sensors Journal, 2021, 21, 20165-20175.	4.7	3
8	Backside Illuminated â€œGe-on-Siâ€•NIR Camera. IEEE Sensors Journal, 2021, 21, 18696-18705.	4.7	11
9	A Flexible Chip-Film Patch and a Flexible Strain Gauge Sensor Suitable for a Hybrid System-in-Foil Integration. IEEE Sensors Journal, 2021, 21, 26345-26354.	4.7	4
10	Ge-on-Si camera for NIR detection. , 2021, , .		0
11	Ultra-Efficient Silicon-on-Insulator Grating Couplers With Backside Metal Mirrors. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-6.	2.9	31
12	Roadmap to Gigahertz Organic Transistors. Advanced Functional Materials, 2020, 30, 1903812.	14.9	52
13	Evaluation of High-Temperature High-Frequency GaN-Based LC-Oscillator Components. IEEE Transactions on Electron Devices, 2020, 67, 4587-4591.	3.0	5
14	Flexible low-voltage high-frequency organic thin-film transistors. Science Advances, 2020, 6, eaaz5156.	10.3	133
15	Analysis of an AlGaN/AlN Super-Lattice Buffer Concept for 650-V Low-Dispersion and High-Reliability GaN HEMTs. IEEE Transactions on Electron Devices, 2020, 67, 1113-1119.	3.0	27
16	Consistent Surface-Potential-Based Modeling of Drain and Gate Currents in AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2020, 67, 455-462.	3.0	12
17	Characterization of On-Foil Sensors and Ultra-Thin Chips for HySiF Integration. IEEE Sensors Journal, 2020, 20, 7595-7604.	4.7	2
18	Low-Power Organic Light Sensor Array Based on Active-Matrix Common-Gate Transimpedance Amplifier on Foil for Imaging Applications. IEEE Journal of Solid-State Circuits, 2020, 55, 2553-2566.	5.4	20

#	Article	IF	Citations
19	Investigation of Long-Term Stability of Hybrid Systems-in-Foil (HySiF) for Biomedical Applications. , 2020, , .		1
20	Miniaturized Optical Encoder with Micro Structured Encoder Disc. Applied Sciences (Switzerland), 2019, 9, 452.	2.5	9
21	Toward a flexible and adaptive wireless hub by embedding power amplifier thinned silicon chip and antenna in a polymer foil. International Journal of Microwave and Wireless Technologies, 2019, 11, 864-871.	1.9	6
22	Characterization of Thin-Film Temperature Sensors and Ultra-Thin Chips for HySiF Integration. , 2019, , .		6
23	Hybrid Systems-in-Foilâ€"Combining the Merits of Thin Chips and of Large-Area Electronics. IEEE Journal of the Electron Devices Society, 2019, 7, 776-783.	2.1	20
24	Temperature dependent lateral and vertical conduction mechanisms in AlGaN/GaN HEMT on thinned silicon substrate. Japanese Journal of Applied Physics, 2019, 58, SCCD11.	1.5	2
25	Small contact resistance and high-frequency operation of flexible low-voltage inverted coplanar organic transistors. Nature Communications, 2019, 10, 1119.	12.8	163
26	Lowâ€Voltage, Highâ€Frequency Organic Transistors and Unipolar and Complementary Ring Oscillators on Paper. Advanced Electronic Materials, 2019, 5, 1800453.	5.1	40
27	Ultraâ€thin smart electronic skin based on hybrid systemâ€inâ€foil concept combining three flexible electronics technologies. Electronics Letters, 2018, 54, 338-340.	1.0	28
28	Multi-Chip Patch in Low Stress Polymer Foils based on an Adaptive Layout for Flexible Sensor Systems. , 2018, , .		13
29	Low-Dispersion, High-Voltage, Low-Leakage GaN HEMTs on Native GaN Substrates. IEEE Transactions on Electron Devices, 2018, 65, 2939-2947.	3.0	36
30	Stencil lithography for organic thin-film transistors with a channel length of 300â€¯nm. Organic Electronics, 2018, 61, 65-69.	2.6	31
31	Adaptive Layout Technique for Microhybrid Integration of Chip-Film Patch. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 802-810.	2.5	20
32	Parameter Uniformity of Submicron-Channel-Length Organic Thin-Film Transistors Fabricated by Stencil Lithography. IEEE Nanotechnology Magazine, 2017, 16, 837-841.	2.0	18
33	A digital library for a flexible low-voltage organic thin-film transistor technology. Organic Electronics, 2017, 50, 491-498.	2.6	36
34	Detailed analysis and contact properties of low-voltage organic thin-film transistors based on dinaphtho[2,3-b:2â€²,3â€²-f]thieno[3,2-b]thiophene (DNTT) and its didecyl and diphenyl derivatives. Organic Electronics, 2016, 35, 33-40.	2.6	83
35	Organic Thin-Film Transistors: Flexible Low-Voltage Organic Complementary Circuits: Finding the Optimum Combination of Semiconductors and Monolayer Gate Dielectrics (Adv. Mater. 2/2015). Advanced Materials, 2015, 27, 391-391.	21.0	0
36	Thermal characterization and modeling of ultra-thin silicon chips. Solid-State Electronics, 2015, 113, 121-126.	1.4	3

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37	Flexible low-voltage organic phototransistors based on air-stable dinaphtho[2,3-b:2â€²,3â€²-f]thieno[3,2-b]thiophene (DNTT). Organic Electronics, 2015, 20, 63-68.	2.6	54
38	Hybrid Systems in Foil (HySiF) exploiting ultra-thin flexible chips. Solid-State Electronics, 2015, 113, 101-108.	1.4	31
39	Flexible Lowâ€Voltage Organic Complementary Circuits: Finding the Optimum Combination of Semiconductors and Monolayer Gate Dielectrics. Advanced Materials, 2015, 27, 207-214.	21.0	106
40	Accurate Capacitance Modeling and Characterization of Organic Thin-Film Transistors. IEEE Transactions on Electron Devices, 2014, 61, 98-104.	3.0	55
41	Bridging the gap between optical fibers and silicon photonic integrated circuits. Optics Express, 2014, 22, 1277.	3.4	279
42	Numerical analysis of capacitance compact models for organic thin-film transistors. Organic Electronics, 2014, 15, 1503-1508.	2.6	12
43	Megahertz operation of flexible low-voltage organic thin-film transistors. Organic Electronics, 2013, 14, 1516-1520.	2.6	73
44	S-Parameter Characterization of Submicrometer Low-Voltage Organic Thin-Film Transistors. IEEE Electron Device Letters, 2013, 34, 520-522.	3.9	53
45	AC characterization of organic thin-film transistors with asymmetric gate-to-source and gate-to-drain overlaps. Organic Electronics, 2013, 14, 1318-1322.	2.6	32
46	Compensation of externally applied mechanical stress by stacking of ultrathin chips. Solid-State Electronics, 2012, 74, 102-107.	1.4	12
47	Two-Dimensional Flex Sensor Exploiting Stacked Ultrathin Chips. IEEE Electron Device Letters, 2012, 33, 444-446.	3.9	15
48	Contact Resistance and Megahertz Operation of Aggressively Scaled Organic Transistors. Small, 2012, 8, 73-79.	10.0	217
49	A 3.3 V 6-Bit 100 kS/s Current-Steering Digital-to-Analog Converter Using Organic P-Type Thin-Film Transistors on Glass. IEEE Journal of Solid-State Circuits, 2012, 47, 292-300.	5.4	78
50	An Ultra-Low-Power BPSK Receiver and Demodulator Based on Injection-Locked Oscillators. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1339-1349.	4.6	17
51	Compact modeling of CMOS transistors under variable uniaxial stress. Solid-State Electronics, 2011, 57, 52-60.	1.4	24
52	Ultra-thin chip technology and applications, a new paradigm in silicon technology. Solid-State Electronics, 2010, 54, 818-829.	1.4	73
53	A New Fabrication and Assembly Process for Ultrathin Chips. IEEE Transactions on Electron Devices, 2009, 56, 321-327.	3.0	73
54	Modeling of strained CMOS on disposable SiGe dots: Shape impacts on electrical/thermal characteristics. Solid-State Electronics, 2008, 52, 919-925.	1.4	5

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55	Thermal Issues in Micromachined Spiral Inductors for High-Power Applications. IEEE Transactions on Electron Devices, 2008, 55, 3288-3294.	3.0	5
56	Magnetic-Multilayered Interconnects Featuring Skin Effect Suppression. IEEE Electron Device Letters, 2008, 29, 319-321.	3.9	26
57	Integrated Microstrip Lines With Coâ€“Taâ€“Zr Magnetic Films. IEEE Transactions on Magnetics, 2008, 44, 3103-3106.	2.1	4
58	Thin Film on CMOS Active Pixel Sensor for Space Applications. Sensors, 2008, 8, 6340-6354.	3.8	5
59	Experimental Determination of the Nonuniform Shape-Induced Anisotropy Field in Thin Niâ€“Fe Films. IEEE Transactions on Magnetics, 2007, 43, 1880-1883.	2.1	6
60	Ferromagnetic Thin Films for Loss Reduction in On-Chip Transmission Lines. IEEE Transactions on Magnetics, 2007, 43, 2630-2632.	2.1	3
61	Modeling of Strained CMOS on Disposable SiGe Dots: Strain Impacts on Devices' Electrical Characteristics. IEEE Transactions on Electron Devices, 2007, 54, 2321-2326.	3.0	10
62	Extraction of collector resistances for device characterization and compact models. Solid-State Electronics, 2006, 50, 1475-1478.	1.4	3
63	Magnetic properties of electroplated nano/microgranular NiFe thin films for rf application. Journal of Applied Physics, 2005, 97, 10N305.	2.5	27
64	Spray coating of photoresist for pattern transfer on high topography surfaces. Journal of Micromechanics and Microengineering, 2005, 15, 691-697.	2.6	105
65	International Workshop on High Frequency Micromagnetic Devices and Materials. Transactions of the Magnetics Society of Japan, 2002, 2, 355-356.	0.5	1
66	Status and trends of silicon RF technology. Microelectronics Reliability, 2001, 41, 13-19.	1.7	29
67	Dopant interactions during the diffusion of arsenic and boron in opposite directions in polycrystalline/monocrystalline silicon structures. Applied Physics Letters, 1995, 67, 3156-3158.	3.3	1