

Soeren Steudel

List of Publications by Year in descending order

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87
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citations

172457

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88
all docs

88
docs citations

88
times ranked

3229
citing authors

#	ARTICLE	IF	CITATIONS
1	External compensation for high-resolution active matrix organic light-emitting diode displays. Journal of the Society for Information Display, 2021, 29, 511-525.	2.1	5
2	Origin of High Current and Illumination Stress Instability in Self-Aligned a-InGaZnO Thin Film Transistors With Al ₂ O ₃ as High- κ Gate Dielectric. IEEE Electron Device Letters, 2020, 41, 565-568.	3.9	11
3	(Invited) Sub-40mV Sigma V _{TH} Igzo nFETs in 300mm Fab. ECS Transactions, 2020, 98, 205-217.	0.5	7
4	Flexible 16nJ/c.s. 134S/s 6b MIM C-2C ADC using Dual Gate Self-aligned Unipolar Metal-Oxide TFTs. , 2019, , .		6
5	Invited Paper: Metal-oxide readout electronics based on Indium-Gallium-Zinc-Oxide and Indium-Tin-Zinc-Oxide for in-panel fingerprint detection application. Digest of Technical Papers SID International Symposium, 2019, 50, 95-98.	0.3	9
6	High-temperature thin-film barriers for foldable AMOLED displays. Journal of the Society for Information Display, 2018, 26, 214-222.	2.1	4
7	High resolution photolithography for direct view active matrix organic light-emitting diode augmented reality displays. Journal of the Society for Information Display, 2018, 26, 128-136.	2.1	22
8	Self-Aligned Amorphous Indium-Tin-Zinc-Oxide Thin Film Transistors on Polyimide Foil. ECS Journal of Solid State Science and Technology, 2018, 7, P185-P191.	1.8	10
9	In-Panel 31.17dB 140kHz 87 μ W Unipolar Dual-Gate In-Ga-Zn-O Charge-Sense Amplifier for 500dpi Sensor Array on Flexible Displays. , 2018, , .		3
10	Effect of High Oxygen Partial Pressure on Carrier Transport Mechanism in a-InGaZnO TFTs. IEEE Transactions on Electron Devices, 2018, 65, 2833-2837.	3.0	9
11	15.2 A flexible ISO14443-A compliant 7.5mW 128b metal-oxide NFC barcode tag with direct clock division circuit from 13.56MHz carrier. , 2017, , .		42
12	Power saving through state retention in IGZO-TFT AMOLED displays for wearable applications. Journal of the Society for Information Display, 2017, 25, 222-228.	2.1	44
13	Characteristics improvement of top-gate self-aligned amorphous indium gallium zinc oxide thin-film transistors using a dual-gate control. Journal of the Society for Information Display, 2017, 25, 349-355.	2.1	26
14	Distinguished Paper: Power Saving through State Retention in IGZO-TFT AMOLED Displays for Wearable Applications. Digest of Technical Papers SID International Symposium, 2017, 48, 38-41.	0.3	2
15	ESD characterisation of a-IGZO TFTs on Si and foil substrates. , 2017, , .		2
16	An active artificial iris controlled by a 25- $\frac{1}{4}$ W flexible thin-film driver. , 2016, , .		4
17	16.6 Flexible thin-film NFC transponder chip exhibiting data rates compatible to ISO NFC standards using self-aligned metal-oxide TFTs. , 2016, , .		35
18	16.5 A flexible thin-film pixel array with a charge-to-current gain of 59 μ A/pC and 0.33% nonlinearity and a cost effective readout circuit for large-area X-ray imaging. , 2016, , .		7

#	ARTICLE	IF	CITATIONS
19	Paper No S12.5: Self-Aligned a-IGZO TFTs: Impact of S/D Contacts Formation on Their Negative-Bias-Illumination-Stress (NBIS) Instability. Digest of Technical Papers SID International Symposium, 2015, 46, 55-55.	0.3	0
20	P46: Impact of Buffer Layers on the Self-Aligned Top-Gate a-IGZO TFT Characteristics. Digest of Technical Papers SID International Symposium, 2015, 46, 1139-1142.	0.3	4
21	Impact of source/drain contacts formation of self-aligned amorphous a-IGZO TFTs on their negative-bias-illumination-stress stabilities. Journal of the Society for Information Display, 2015, 23, 397-402.	2.1	4
22	29.4: Flexible AMOLED Display with Integrated Gate Driver Operating at Operation Speed Compatible with 4k2k. Digest of Technical Papers SID International Symposium, 2015, 46, 427-430.	0.3	8
23	Analysis of frequency dispersion in amorphous In-Ga-Zn-O thin-film transistors. Journal of Information Display, 2015, 16, 31-36.	4.0	11
24	Organic photodetectors with active layer patterned by lithography. , 2015, , .		0
25	Integrated Line Driver for Digital Pulse-Width Modulation Driven AMOLED Displays on Flex. IEEE Journal of Solid-State Circuits, 2015, 50, 282-290.	5.4	20
26	Low-temperature formation of source-drain contacts in self-aligned amorphous oxide thin-film transistors. Journal of Information Display, 2015, 16, 111-117.	4.0	23
27	Impact of the Low Temperature Gate Dielectrics on Device Performance and Bias-Stress Stabilities of a-IGZO Thin-Film Transistors. ECS Journal of Solid State Science and Technology, 2015, 4, N99-N102.	1.8	16
28	Uniform Aerosol Jet printed polymer lines with 30 ¹ / ₄ m width for 140ppi resolution RGB organic light emitting diodes. Organic Electronics, 2015, 22, 40-43.	2.6	77
29	Medium Frequency Physical Vapor Deposited Al ₂ O ₃ and SiO ₂ as Etch-Stop-Layers for Amorphous Indium-Gallium-Zinc-Oxide Thin-Film-Transistors. ECS Journal of Solid State Science and Technology, 2015, 4, Q38-Q42.	1.8	10
30	Back-channel-etch amorphous indium-gallium-zinc oxide thin-film transistors: The impact of source/drain metal etch and final passivation. Japanese Journal of Applied Physics, 2014, 53, 111401.	1.5	27
31	Comparative study of source-drain contact metals for amorphous InGaZnO thin-film transistors. Journal of the Society for Information Display, 2014, 22, 310-315.	2.1	6
32	Ultralow power transponder in thin film circuit technology on foil with sub − 1V operation voltage. , 2014, , .		4
33	High performance a-IGZO thin-film transistors with m-PVD SiO ₂ as an etch-stop-layer. Journal of the Society for Information Display, 2014, 22, 23-28.	2.1	31
34	20.1: Flexible AMOLED Display and Gate-driver with Self-Aligned IGZO TFT on Plastic Foil. Digest of Technical Papers SID International Symposium, 2014, 45, 248-251.	0.3	27
35	13.4: Flexible Low Temperature Solution Processed Oxide Semiconductor TFT Backplanes for Use in AMOLED Displays. Digest of Technical Papers SID International Symposium, 2014, 45, 161-163.	0.3	13
36	Circuits and AMOLED display with self-aligned a-IGZO TFTs on polyimide foil. Journal of the Society for Information Display, 2014, 22, 509-517.	2.1	23

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37	High-Performance a-IGZO Thin Film Diode as Selector for Cross-Point Memory Application. IEEE Electron Device Letters, 2014, 35, 642-644.	3.9	39
38	Photolithographic patterning of organic photodetectors with a non-fluorinated photoresist system. Organic Electronics, 2014, 15, 2355-2359.	2.6	29
39	Multiscale Modeling of the Electrostatic Impact of Self-Assembled Monolayers used as Gate Dielectric Treatment in Organic Thin-Film Transistors. ACS Applied Materials & Interfaces, 2014, 6, 15372-15378.	8.0	37
40	Scaling down of organic complementary logic gates for compact logic on foil. Organic Electronics, 2014, 15, 1229-1234.	2.6	30
41	Impact of etch stop layer on negative bias illumination stress of amorphous Indium Gallium Zinc Oxide transistors. , 2014, , .		2
42	Organic RFID Tags. Integrated Circuits and Systems, 2013, , 133-155.	0.2	4
43	18.4L: <i>Lateâ€News Paper</i>: Full Color Flexible Topâ€emission AMOLED Display on Polyethylene Naphthalate (PEN) Foil with Metal Oxide TFTs Backplane. Digest of Technical Papers SID International Symposium, 2013, 44, 203-206.	0.3	12
44	Singleâ€source dualâ€layer amorphous IGZO thinâ€film transistors for display and circuit applications. Journal of the Society for Information Display, 2013, 21, 129-136.	2.1	40
45	Gigahertz Operation of a-IGZO Schottky Diodes. IEEE Transactions on Electron Devices, 2013, 60, 3407-3412.	3.0	64
46	Integrated UHF a-IGZO energy harvester for passive RFID tags. , 2013, , .		12
47	Novel backâ€channelâ€etch process flow based aâ€IGZO TFTs for circuit and display applications on PEN foil. Journal of the Society for Information Display, 2013, 21, 369-375.	2.1	27
48	UHF IGZO Schottky diode. , 2012, , .		21
49	High-performance a-In-Ga-Zn-O Schottky diode with oxygen-treated metal contacts. Applied Physics Letters, 2012, 101, .	3.3	81
50	Solutionâ€processed and lowâ€temperature metal oxide nâ€channel thinâ€film transistors and lowâ€voltage complementary circuitry on largeâ€area flexible polyimide foil. Journal of the Society for Information Display, 2012, 20, 499-507.	2.1	19
51	Design and realization of a flexible QQVGA AMOLED display with organic TFTs. Organic Electronics, 2012, 13, 1729-1735.	2.6	89
52	A 6b 10MS/s current-steering DAC manufactured with amorphous Gallium-Indium-Zinc-Oxide TFTs achieving SFDR > 30dB up to 300kHz. , 2012, , .		19
53	Interlayer Processing in Active Matrix OLED Displays. , 2011, , .		0
54	Low-temperature and scalable complementary thin-film technology based on solution-processed metal oxide n-TFTs and pentacene p-TFTs. Organic Electronics, 2011, 12, 1909-1913.	2.6	45

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55	Towards EPC-Compatible Organic RFID Tags. , 2011, , 347-367.		0
56	Noise-Margin Analysis for Organic Thin-Film Complementary Technology. IEEE Transactions on Electron Devices, 2010, 57, 201-208.	3.0	58
57	Pulsed Excitation of OLEDs With a Remote Metallic Cathode. IEEE Journal of Quantum Electronics, 2010, 46, 62-67.	1.9	11
58	A low-temperature-cross-linked poly(4-vinylphenol) gate-dielectric for organic thin film transistors. Thin Solid Films, 2010, 519, 391-393.	1.8	32
59	Towards EPC Compatible Plastic RFID Tags. ECS Meeting Abstracts, 2010, MA2010-02, 1830-1830.	0.0	0
60	Organic complementary oscillators with stage-delays below 1â€¼s. Applied Physics Letters, 2010, 96, 133307.	3.3	34
61	Adhesion Promoting Polymer Interlayers for Ag Layers Deposited in OLED Processing. Journal of Adhesion Science and Technology, 2010, 24, 1145-1151.	2.6	5
62	(Invited) Towards EPC Compatible Plastic RFID Tags. ECS Transactions, 2010, 33, 383-389.	0.5	4
63	An organic integrated capacitive DC-DC up-converter. , 2010, , .		10
64	Design and manufacturing of organic RFID circuits: Coping with intrinsic parameter variations in organic devices by circuit design. , 2010, , .		4
65	Functional Pentacene Thin Films Grown by In-Line Organic Vapor Phase Deposition at Web Speeds above 2 m/min. Applied Physics Express, 2009, 2, 086503.	2.4	11
66	High-speed growth of pentacene thin films by in-line organic vapor phase deposition. Proceedings of SPIE, 2009, , .	0.8	3
67	Plastic circuits and tags for 13.56MHz radio-frequency communication. Solid-State Electronics, 2009, 53, 1220-1226.	1.4	127
68	Nanoparticle-based, spray-coated silver top contacts for efficient polymer solar cells. Organic Electronics, 2009, 10, 735-740.	2.6	103
69	Ultra-High Frequency rectification using organic diodes. , 2008, , .		13
70	An integrated double half-wave organic Schottky diode rectifier on foil operating at 13.56 MHz. Applied Physics Letters, 2008, 93, 093305.	3.3	71
71	Correlation between bias stress instability and phototransistor operation of pentacene thin-film transistors. Applied Physics Letters, 2007, 91, 103508.	3.3	104
72	Light-emitting organic field-effect transistor using an organic heterostructure within the transistor channel. Applied Physics Letters, 2006, 89, 223504.	3.3	36

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73	Light-emitting organic field-effect transistors using an organic heterostructure inside the transistor channel. , 2006, 6192, 71.		1
74	Integrated shadow mask method for patterning small molecule organic semiconductors. Applied Physics Letters, 2006, 88, 103501.	3.3	52
75	Pentacene devices and logic gates fabricated by organic vapor phase deposition. Applied Physics Letters, 2006, 89, 203502.	3.3	43
76	Comparison of organic diode structures regarding high-frequency rectification behavior in radio-frequency identification tags. Journal of Applied Physics, 2006, 99, 114519.	2.5	103
77	Low voltage complementary organic inverters. Applied Physics Letters, 2006, 88, 162116.	3.3	61
78	Self-aligned surface treatment for thin-film organic transistors. Applied Physics Letters, 2006, 88, 222103.	3.3	34
79	Patterning of organic thin film transistors by oxygen plasma etch. Applied Physics Letters, 2006, 89, 183503.	3.3	42
80	50 MHz rectifier based on an organic diode. Nature Materials, 2005, 4, 597-600.	27.5	240
81	High-Performance Low Voltage Organic Thin-Film Transistors. Materials Research Society Symposia Proceedings, 2005, 870, 141.	0.1	9
82	Patterned growth of pentacene. Applied Physics Letters, 2004, 85, 5550-5552.	3.3	46
83	Patterned growth of organic small-molecule layers. Materials Research Society Symposia Proceedings, 2004, 814, 119.	0.1	0
84	Influence of the dielectric roughness on the performance of pentacene transistors. Applied Physics Letters, 2004, 85, 4400.	3.3	362
85	Nucleation of organic semiconductors on inert substrates. Physical Review B, 2003, 68, .	3.2	231
86	Intra-Grain and Oligo-Grain Top-Contact Organic Thin film Transistors. Materials Research Society Symposia Proceedings, 2003, 771, 691.	0.1	0
87	Organic RFID Tags. , 0, , .		2