Miao Xu

List of Publications by Year in Descending Order

108 papers	5,384 citations	23 h-index	72 g-index
108 ext. papers	5,678 ext. citations	4.6 avg, IF	5.48 L-index

#	Paper	IF	Citations
108	High performance and illumination stable In2O3 nanofibers-based field effect transistors by doping praseodymium. *Surfaces and Interfaces*, **2022**, 29, 101781	4.1	0
107	An Analytical Frequency-Dependent Capacitance-Voltage Model for Metal Oxide Thin-Film Transistors. *IEEE Transactions on Electron Devices*, **2021**, 1-6	2.9	
106	Enhanced Negative-Bias Illumination Temperature Stability of Praseodymium-Doped InGaO Thin-Film Transistors. *Physica Status Solidi (A) Applications and Materials Science*, **2021**, 218, 2000812	1.6	2
105	The effect of charge transfer transition on the photostability of lanthanide-doped indium oxide thin-film transistors. *Communications Materials*, **2021**, 2,	6	8
104	A 256 □256, 50-□m Pixel Pitch OPD Image Sensor Based on an IZO TFT Backplane. *IEEE Sensors Journal*, **2021**, 21, 20824-20832	4	0
103	Optimization of carrier transport layer: A simple but effective approach toward achieving high efficiency all-solution processed InP quantum dot light emitting diodes. *Organic Electronics*, **2021**, 96, 106256	3.5	1
102	A scan driver including light emission control integrated by metal-oxide thin-film transistors. *Semiconductor Science and Technology*, **2020**, 36, 025006	1.8	1
101	A metal oxide TFT gate driver with a single negative power source employing a boosting module. *Journal of Information Display*, **2020**, 21, 57-64	4.1	2
100	High-Performance Back-Channel-Etch Thin-Film Transistors With Zinc Tin Oxide as Barrier Layer via Spray Coating. *IEEE Transactions on Electron Devices*, **2019**, 66, 3854-3860	2.9	4
99	Effects of praseodymium doping on the electrical properties and aging effect of InZnO thin-film transistor. *Journal of Materials Science*, **2019**, 54, 14778-14786	4.3	12
98	15.2: Invited Paper: Back-Channel-Etch Thin Film Transistors with Zinc Tin Oxide as Barrier Layer via Spray Coating. *Digest of Technical Papers SID International Symposium*, **2019**, 50, 152-152	0.5	
97	Trap-Assisted Enhanced Bias Illumination Stability of Oxide Thin Film Transistor by Praseodymium Doping. *ACS Applied Materials & Interfaces*, **2019**, 11, 5232-5239	9.5	20
96	A low-power gate driver integrated by IZO-TFTs employing single negative power source. *Semiconductor Science and Technology*, **2018**, 33, 065006	1.8	4
95	Effect of ITO Serving as a Barrier Layer for Cu Electrodes on Performance of a-IGZO TFT. *IEEE Electron Device Letters*, **2018**, 39, 504-507	4.4	18
94	High-Performance and Flexible Neodymium- Doped Oxide Semiconductor Thin-Film Transistors With Copper Alloy Bottom-Gate Electrode. *IEEE Electron Device Letters*, **2018**, 39, 839-842	4.4	7
93	Reduced contact resistance of a-IGZO thin film transistors with inkjet-printed silver electrodes. *Journal Physics D: Applied Physics*, **2018**, 51, 165103	3	9
92	Effect of Al2O3 Passivation Layer and Cu Electrodes on High Mobility of Amorphous IZO TFT. *IEEE Journal of the Electron Devices Society*, **2018**, 6, 733-737	2.3	16

91	Mobility Enhancement in Amorphous In-Ga-Zn-O Thin-Film Transistor by Induced Metallic in Nanoparticles and Cu Electrodes. *Nanomaterials*, **2018**, 8,	5.4	16
90	Improving Thermal Stability of Solution-Processed Indium Zinc Oxide Thin-Film Transistors by Praseodymium Oxide Doping. *ACS Applied Materials & Interfaces*, **2018**, 10, 28764-28771	9.5	13
89	A Semi-Analytical Extraction Method for Interface and Bulk Density of States in Metal Oxide Thin-Film Transistors. *Materials*, **2018**, 11,	3.5	1
88	Manchester-encoded data transmission circuit integrated by metal□xide TFTs suitable for 13.56 MHz radio-frequency identification tag application. *IET Circuits, Devices and Systems*, **2018**, 12, 771-776	1.1	2
87	High-Resolution Flexible AMOLED Display Integrating Gate Driver by Metal□xide TFTs. *IEEE Electron Device Letters*, **2018**, 39, 1660-1663	4.4	12
86	A low-power D flip flop integrated by metal oxide thin film transistors employing internal feedback control. *Semiconductor Science and Technology*, **2018**, 33, 115004	1.8	3
85	TFT-Directed Electroplating of RGB Luminescent Films without a Vacuum or Mask toward a Full-Color AMOLED Pixel Matrix. *ACS Applied Materials & Interfaces*, **2018**, 10, 17519-17525	9.5	18
84	A physics-based model of flat-band capacitance for metal oxide thin-film transistors. *AIP Advances*, **2018**, 8, 065319	1.5	3
83	A High-Reliability Gate Driver Integrated in Flexible AMOLED Display by IZO TFTs. *IEEE Transactions on Electron Devices*, **2017**, 64, 1991-1996	2.9	17
82	Light extraction of flexible OLEDs based on transparent polyimide substrates with 3-D photonic structure. *Organic Electronics*, **2017**, 44, 225-231	3.5	20
81	A room temperature strategy towards enhanced performance and bias stability of oxide thin film transistor with a sandwich structure channel layer. *Applied Physics Letters*, **2017**, 110, 153503	3.4	9
80	Island-Like AZO/Al2O3 Bilayer Channel Structure for Thin Film Transistors. *Advanced Materials Interfaces*, **2017**, 4, 1700063	4.6	6
79	High Mobility Amorphous Indium-Gallium-Zinc-Oxide Thin-Film Transistor by Aluminum Oxide Passivation Layer. *IEEE Electron Device Letters*, **2017**, 38, 879-882	4.4	38
78	Manipulation of exciton distribution for high-performance fluorescent/phosphorescent hybrid white organic light-emitting diodes. *Journal of Materials Chemistry C*, **2017**, 5, 7668-7683	7.1	84
77	24-4: Flexible AMOLED based on Oxide TFT with High Mobility. *Digest of Technical Papers SID International Symposium*, **2017**, 48, 342-344	0.5	5
76	Highly conductive AZO thin films obtained by rationally optimizing substrate temperature and oxygen partial pressure. *Molecular Crystals and Liquid Crystals*, **2017**, 644, 190-196	0.5	2
75	Enhanced moisture barrier performance for ALD-encapsulated OLEDs by introducing an organic protective layer. *Journal of Materials Chemistry C*, **2017**, 5, 4017-4024	7.1	51
74	Doping-free tandem white organic light-emitting diodes. *Science Bulletin*, **2017**, 62, 1193-1200	10.6	28

73	High-Performance Doping-Free Hybrid White OLEDs Based on Blue Aggregation-Induced Emission Luminogens. *ACS Applied Materials & Interfaces*, **2017**, 9, 34162-34171	9.5	59
72	Full-color quantum dots active matrix display fabricated by ink-jet printing. *Science China Chemistry*, **2017**, 60, 1349-1355	7.9	41
71	Highly transparent and thermal-stable silver nanowire conductive film covered with ZnMgO by atomic-layer-deposition. *Journal of Physics and Chemistry of Solids*, **2017**, 111, 328-334	3.9	4
70	Direct patterning of silver electrodes with 2.4□h channel length by piezoelectric inkjet printing. *Journal of Colloid and Interface Science*, **2017**, 487, 68-72	9.3	22
69	A Low-Power Ring Oscillator Using Pull-Up Control Scheme Integrated by Metal□Oxide TFTs. *IEEE Transactions on Electron Devices*, **2017**, 64, 4946-4951	2.9	14
68	Effect of Intrinsic Stress on Structural and Optical Properties of Amorphous Si-Doped SnO□ Thin-Film. *Materials*, **2017**, 10,	3.5	10
67	All-Aluminum Thin Film Transistor Fabrication at Room Temperature. *Materials*, **2017**, 10,	3.5	11
66	Realization of AlO/MgO laminated structure at low temperature for thin film encapsulation in organic light-emitting diodes. *Nanotechnology*, **2016**, 27, 494003	3.4	21
65	High-mobility ZrInO thin-film transistor prepared by an all-DC-sputtering method at room temperature. *Scientific Reports*, **2016**, 6, 25000	4.9	15
64	A Low-Power High-Stability Flexible Scan Driver Integrated by IZO TFTs. *IEEE Transactions on Electron Devices*, **2016**, 63, 1779-1782	2.9	20
63	Improvement of Mobility and Stability in Oxide Thin-Film Transistors Using Triple-Stacked Structure. *IEEE Electron Device Letters*, **2016**, 37, 57-59	4.4	14
62	Effect of Post Treatment For Cu-Cr Source/Drain Electrodes on a-IGZO TFTs. *Materials*, **2016**, 9,	3.5	17
61	Letter: Solution-processed flexible zinc-tin oxide thin-film transistors on ultra-thin polyimide substrates. *Journal of the Society for Information Display*, **2016**, 24, 211-215	2.1	3
60	High-mobility flexible thin-film transistors with a low-temperature zirconium-doped indium oxide channel layer. *Physica Status Solidi - Rapid Research Letters*, **2016**, 10, 493-497	2.5	11
59	Manipulation of Charge and Exciton Distribution Based on Blue Aggregation-Induced Emission Fluorophors: A Novel Concept to Achieve High-Performance Hybrid White Organic Light-Emitting Diodes. *Advanced Functional Materials*, **2016**, 26, 776-783	15.6	171
58	High-performance back-channel-etched thin-film transistors with amorphous Si-incorporated SnO2 active layer. *Applied Physics Letters*, **2016**, 108, 112106	3.4	22
57	A physics-based model of threshold voltage for amorphous oxide semiconductor thin-film transistors. *AIP Advances*, **2016**, 6, 035025	1.5	5
56	A novel nondestructive testing method for amorphous Si□SnO□ films. *Journal Physics D: Applied Physics*, **2016**, 49, 505102	3	14

55	Low-temperature, high-stability, flexible thin-film transistors with a novel ScxIn1xO3semiconductor. *Journal Physics D: Applied Physics*, **2016**, 49, 24LT01	3	9
54	Analytical Extraction Method for Density of States in Metal Oxide Thin-Film Transistors by Using Low-Frequency CapacitanceVoltage Characteristics. *Journal of Display Technology*, **2016**, 12, 888-891		15
53	High-performance doping-free hybrid white organic light-emitting diodes: The exploitation of ultrathin emitting nanolayers (. *Nano Energy*, **2016**, 26, 26-36	17.1	84
52	Power Consumption Model for AMOLED Display Panel Based on 2T-1C Pixel Circuit. *Journal of Display Technology*, **2016**, 12, 1064-1069		15
51	Facilitation of transparent gas barrier using SiNx/a-IZO lamination for organic light emitting diodes. *Organic Electronics*, **2015**, 24, 57-64	3.5	6
50	Harnessing charge and exciton distribution towards extremely high performance: the critical role of guests in single-emitting-layer white OLEDs. *Materials Horizons*, **2015**, 2, 536-544	14.4	44
49	High mobility flexible polymer thin-film transistors with an octadecyl-phosphonic acid treated electrochemically oxidized alumina gate insulator. *Journal of Materials Chemistry C*, **2015**, 3, 7062-7066	7.1	17
48	Flexible organic field-effect transistors with high-reliability gate insulators prepared by a room-temperature, electrochemical-oxidation process. *RSC Advances*, **2015**, 5, 15695-15699	3.7	15
47	High-performance hybrid white organic light-emitting diodes employing p-type interlayers. *Journal of Industrial and Engineering Chemistry*, **2015**, 27, 240-244	6.3	17
46	Method for Fabricating Amorphous Indium-Zinc-Oxide Thin-Film Transistors With Copper Source and Drain Electrodes. *IEEE Electron Device Letters*, **2015**, 36, 342-344	4.4	21
45	An ideal host-guest system to accomplish high-performance greenish yellow and hybrid white organic light-emitting diodes. *Organic Electronics*, **2015**, 27, 29-34	3.5	23
44	Design of high speed gate driver employing IZO TFTs. *Displays*, **2015**, 39, 93-99	3.4	4
43	IndiumGalliumZincOxide Thin-Film Transistors Based on Homojunctioned Structure Fabricated With a Self-Aligned Process. *Journal of Display Technology*, **2015**, 11, 589-595		4
42	Realization of highly-dense Al2O3 gas barrier for top-emitting organic light-emitting diodes by atomic layer deposition. *RSC Advances*, **2015**, 5, 104613-104620	3.7	26
41	Letter: A new compensation pixel circuit with metal oxide thin-film transistors for active-matrix organic light-emitting diode displays. *Journal of the Society for Information Display*, **2015**, 23, 233-239	2.1	3
40	Efficient single-emitting layer hybrid white organic light-emitting diodes with low efficiency roll-off, stable color and extremely high luminance. *Journal of Industrial and Engineering Chemistry*, **2015**, 30, 85-91	6.3	19
39	High-speed low-power voltage-programmed driving scheme for AMOLED displays. *Journal of Semiconductors*, **2015**, 36, 125005	2.3	2
38	Influence of source and drain contacts on the properties of indium-gallium-zinc-oxide thin-film transistors based on amorphous carbon nanofilm as barrier layer. *ACS Applied Materials & Interfaces*, **2015**, 7, 3633-40	9.5	25

37	Efficient hybrid white organic light-emitting diodes with extremely long lifetime: the effect of n-type interlayer. *Scientific Reports*, **2014**, 4, 7198	4.9	39
36	Effects of Etching Residue on Positive Shift of Threshold Voltage in Amorphous Indium□inc-Oxide Thin-Film Transistors Based on Back-Channel-Etch Structure. *IEEE Transactions on Electron Devices*, **2014**, 61, 92-97	2.9	20
35	Highly stable amorphous indium-zinc-oxide thin-film transistors with back-channel wet-etch process. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 176-181	2.5	9
34	Performance improvement of oxide thin-film transistors with a two-step-annealing method. *Solid-State Electronics*, **2014**, 91, 9-12	1.7	20
33	Dual Gate Indium□inc Oxide Thin-Film Transistors Based on Anodic Aluminum Oxide Gate Dielectrics. *IEEE Transactions on Electron Devices*, **2014**, 61, 2448-2453	2.9	4
32	Very-High Color Rendering Index Hybrid White Organic Light-Emitting Diodes with Double Emitting Nanolayers. *Nano-Micro Letters*, **2014**, 6, 335-339	19.5	32
31	The effect of spacer in hybrid white organic light emitting diodes. *Science Bulletin*, **2014**, 59, 3090-3097		13
30	A flexible AMOLED display on the PEN substrate driven by oxide thin-film transistors using anodized aluminium oxide as dielectric. *Journal of Materials Chemistry C*, **2014**, 2, 1255-1259	7.1	69
29	Extremely stable-color flexible white organic light-emitting diodes with efficiency exceeding 100 lm W□. *Journal of Materials Chemistry C*, **2014**, 2, 9836-9841	7.1	44
28	Low-Power Bi-Side Scan Driver Integrated by IZO TFTs Including a Clock-Controlled Inverter. *Journal of Display Technology*, **2014**, 10, 523-525		10
27	Damage-free back channel wet-etch process in amorphous indium-zinc-oxide thin-film transistors using a carbon-nanofilm barrier layer. *ACS Applied Materials & Interfaces*, **2014**, 6, 11318-25	9.5	20
26	Simultaneous achievement of low efficiency roll-off and stable color in highly efficient single-emitting-layer phosphorescent white organic light-emitting diodes. *Journal of Materials Chemistry C*, **2014**, 2, 5870-5877	7.1	21
25	A Highly Stable Biside Gate Driver Integrated by IZO TFTs. *IEEE Transactions on Electron Devices*, **2014**, 61, 3335-3338	2.9	16
24	Fabrication of Flexible Amorphous Indium-Gallium-Zinc-Oxide Thin-Film Transistors by a Chemical Vapor Deposition-Free Process on Polyethylene Napthalate. *ECS Journal of Solid State Science and Technology*, **2014**, 3, Q3035-Q3039	2	18
23	Regulating charges and excitons in simplified hybrid white organic light-emitting diodes: The key role of concentration in single dopant host□uest systems. *Organic Electronics*, **2014**, 15, 2616-2623	3.5	30
22	Flexible amorphous oxide thin-film transistors on polyimide substrate for AMOLED **2014**,		1
21	20.4L: Late-News Paper: A Flexible AMOLED Display on PEN Substrate Driven by Oxide Thin-Film Transistors. *Digest of Technical Papers SID International Symposium*, **2014**, 45, 260-262	0.5	3
20	Simplified hybrid white organic light-emitting diodes with efficiency/efficiency roll-off/color rendering index/color-stability trade-off. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 719-723	2.5	13

19	Influence of passivation deposition on the performance of In-Zn-O thin-film transistors based on etch-stopper structure. *Materials Research Express*, **2014**, 1, 036402	1.7	1
18	Investigation and optimization of each organic layer: A simple but effective approach towards achieving high-efficiency hybrid white organic light-emitting diodes. *Organic Electronics*, **2014**, 15, 926-936	3.5	35
17	Investigation on spacers and structures: A simple but effective approach toward high-performance hybrid white organic light emitting diodes. *Synthetic Metals*, **2013**, 184, 5-9	3.6	15
16	. *Journal of Display Technology*, **2013**, 9, 572-576		14
15	Highly efficient red phosphorescent organic light-emitting diodes based on solution processed emissive layer. *Journal of Luminescence*, **2013**, 142, 35-39	3.8	21
14	Comprehensive Study on the Electron Transport Layer in Blue Flourescent Organic Light-Emitting Diodes. *ECS Journal of Solid State Science and Technology*, **2013**, 2, R258-R261	2	23
13	IZO Protected Silver Films Used as Anodes in Top-Emitting Organic LEDs. *ECS Journal of Solid State Science and Technology*, **2013**, 2, R190-R195	2	2
12	Low-Roughness and Easily-Etched Transparent Conducting Oxides with a Stack Structure of ITO and IZO. *ECS Journal of Solid State Science and Technology*, **2013**, 2, R245-R248	2	2
11	High-Performance Hybrid White Organic Light-Emitting Diodes Comprising Ultrathin Blue and Orange Emissive Layers. *Applied Physics Express*, **2013**, 6, 122101	2.4	17
10	16.2: A 4.8-inch AMOLED Display Panel Driven by Stable Amorphous In-Zn-O Thin-Film Transistor. *Digest of Technical Papers SID International Symposium*, **2013**, 44, 170-173	0.5	3
9	. *IEEE Electron Device Letters*, **2012**, 33, 827-829	4.4	50
8	Enhanced power-conversion efficiency in polymer solar cells using an inverted device structure. *Nature Photonics*, **2012**, 6, 591-595	33.9	3384
7	High reliability amorphous oxide semiconductor thin-film transistors gated by buried thick aluminum. *Physica Status Solidi - Rapid Research Letters*, **2012**, 6, 403-405	2.5	9
6	Role of Rare Earth Ions in Anodic Gate Dielectrics for Indium-Zinc-Oxide Thin-Film Transistors. *Journal of the Electrochemical Society*, **2012**, 159, H502-H506	3.9	35
5	Impact of Deposition Temperature of the Silicon Oxide Passivation on the Performance of Indium Zinc Oxide Thin-Film Transistors. *Japanese Journal of Applied Physics*, **2012**, 51, 076501	1.4	5
4	Impact of Deposition Temperature of the Silicon Oxide Passivation on the Performance of Indium Zinc Oxide Thin-Film Transistors. *Japanese Journal of Applied Physics*, **2012**, 51, 076501	1.4	18
3	Influence of source and drain contacts on the properties of the indium-zinc oxide thin-film transistors based on anodic aluminum oxide gate dielectrics. *Journal of Applied Physics*, **2011**, 110, 103703	2.5	29
2	Gate bias stress stability under light irradiation for indium zinc oxide thin-film transistors based on anodic aluminium oxide gate dielectrics. *Journal Physics D: Applied Physics*, **2011**, 44, 455102	3	17

1	High performance indium-zinc-oxide thin-film transistors fabricated with a back-channel-etch-technique. *Applied Physics Letters*, **2011**, 99, 253501	3.4	67