Miao Xu

List of Publications by Year in descending order

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108	6,005	218381	69108
papers	citations	26 h-index	77 g-index

108	108	108	6999
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced power-conversion efficiency in polymer solar cells using an inverted device structure. Nature Photonics, 2012, 6, 591-595.	15.6	3,583
2	Manipulation of Charge and Exciton Distribution Based on Blue Aggregationâ€Induced Emission Fluorophors: A Novel Concept to Achieve Highâ€Performance Hybrid White Organic Lightâ€Emitting Diodes. Advanced Functional Materials, 2016, 26, 776-783.	7.8	194
3	Manipulation of exciton distribution for high-performance fluorescent/phosphorescent hybrid white organic light-emitting diodes. Journal of Materials Chemistry C, 2017, 5, 7668-7683.	2.7	95
4	High-performance doping-free hybrid white organic light-emitting diodes: The exploitation of ultrathin emitting nanolayers (<1 nm). Nano Energy, 2016, 26, 26-36.	8.2	88
5	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.	2.7	84
6	High performance indium-zinc-oxide thin-film transistors fabricated with a back-channel-etch-technique. Applied Physics Letters, 2011, 99, .	1.5	80
7	Full-color quantum dots active matrix display fabricated by ink-jet printing. Science China Chemistry, 2017, 60, 1349-1355.	4.2	67
8	Enhanced moisture barrier performance for ALD-encapsulated OLEDs by introducing an organic protective layer. Journal of Materials Chemistry C, 2017, 5, 4017-4024.	2.7	66
9	High-Performance Doping-Free Hybrid White OLEDs Based on Blue Aggregation-Induced Emission Luminogens. ACS Applied Materials & Interfaces, 2017, 9, 34162-34171.	4.0	66
10	Low-Voltage High-Stability Indiumâ€“Zinc Oxide Thin-Film Transistor Gated by Anodized Neodymium-Doped Aluminum. IEEE Electron Device Letters, 2012, 33, 827-829.	2.2	54
11	High Mobility Amorphous Indium-Gallium-Zinc-Oxide Thin-Film Transistor by Aluminum Oxide Passivation Layer. IEEE Electron Device Letters, 2017, 38, 879-882.	2.2	54
12	Extremely stable-color flexible white organic light-emitting diodes with efficiency exceeding 100 lm W^{â^'1}. Journal of Materials Chemistry C, 2014, 2, 9836-9841.	2.7	48
13	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.	6.4	48
14	Efficient hybrid white organic light-emitting diodes with extremely long lifetime: the effect of n-type interlayer. Scientific Reports, 2014, 4, 7198.	1.6	42
15	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.	1.3	39
16	Doping-free tandem white organic light-emitting diodes. Science Bulletin, 2017, 62, 1193-1200.	4.3	37
17	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.	1.4	36
18	Influence of Source and Drain Contacts on the Properties of Indiumâ€“Galliumâ€“Zinc-Oxide Thin-Film Transistors based on Amorphous Carbon Nanofilm as Barrier Layer. ACS Applied Materials & Interfaces, 2015, 7, 3633-3640.	4.0	35

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19	Very-High Color Rendering Index Hybrid White Organic Light-Emitting Diodes with Double Emitting Nanolayers. Nano-Micro Letters, 2014, 6, 335-339.	14.4	34
20	Trap-Assisted Enhanced Bias Illumination Stability of Oxide Thin Film Transistor by Praseodymium Doping. ACS Applied Materials & Interfaces, 2019, 11, 5232-5239.	4.0	34
21	Regulating charges and excitons in simplified hybrid white organic light-emitting diodes: The key role of concentration in single dopant hostâ€“guest systems. Organic Electronics, 2014, 15, 2616-2623.	1.4	32
22	Realization of highly-dense Al₂O₃ gas barrier for top-emitting organic light-emitting diodes by atomic layer deposition. RSC Advances, 2015, 5, 104613-104620.	1.7	32
23	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, .	1.1	30
24	Direct patterning of silver electrodes with 2.4 Î¼m channel length by piezoelectric inkjet printing. Journal of Colloid and Interface Science, 2017, 487, 68-72.	5.0	30
25	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.	2.2	30
26	An ideal host-guest system to accomplish high-performance greenish yellow and hybrid white organic light-emitting diodes. Organic Electronics, 2015, 27, 29-34.	1.4	28
27	High-performance back-channel-etched thin-film transistors with amorphous Si-incorporated SnO2 active layer. Applied Physics Letters, 2016, 108, .	1.5	25
28	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.	0.9	24
29	Effects of Etching Residue on Positive Shift of Threshold Voltage in Amorphous Indiumâ€“Zinc-Oxide Thin-Film Transistors Based on Back-Channel-Etch Structure. IEEE Transactions on Electron Devices, 2014, 61, 92-97.	1.6	23
30	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.	2.7	23
31	Method for Fabricating Amorphous Indium-Zinc-Oxide Thin-Film Transistors With Copper Source and Drain Electrodes. IEEE Electron Device Letters, 2015, 36, 342-344.	2.2	23
32	A Low-Power High-Stability Flexible Scan Driver Integrated by IZO TFTs. IEEE Transactions on Electron Devices, 2016, 63, 1779-1782.	1.6	23
33	Light extraction of flexible OLEDs based on transparent polyimide substrates with 3-D photonic structure. Organic Electronics, 2017, 44, 225-231.	1.4	23
34	Highly efficient red phosphorescent organic light-emitting diodes based on solution processed emissive layer. Journal of Luminescence, 2013, 142, 35-39.	1.5	22
35	High-Performance Hybrid White Organic Light-Emitting Diodes Comprising Ultrathin Blue and Orange Emissive Layers. Applied Physics Express, 2013, 6, 122101.	1.1	22
36	Performance improvement of oxide thin-film transistors with a two-step-annealing method. Solid-State Electronics, 2014, 91, 9-12.	0.8	22

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37	Power Consumption Model for AMOLED Display Panel Based on 2T-1C Pixel Circuit. Journal of Display Technology, 2016, 12, 1064-1069.	1.3	22
38	Realization of Al₂O₃/MgO laminated structure at low temperature for thin film encapsulation in organic light-emitting diodes. Nanotechnology, 2016, 27, 494003.	1.3	22
39	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.	4.0	22
40	Effects of praseodymium doping on the electrical properties and aging effect of InZnO thin-film transistor. Journal of Materials Science, 2019, 54, 14778-14786.	1.7	22
41	Analytical Extraction Method for Density of States in Metal Oxide Thin-Film Transistors by Using Low-Frequency Capacitanceâ€“Voltage Characteristics. Journal of Display Technology, 2016, 12, 888-891.	1.3	21
42	A High-Reliability Gate Driver Integrated in Flexible AMOLED Display by IZO TFTs. IEEE Transactions on Electron Devices, 2017, 64, 1991-1996.	1.6	21
43	An AC Driving Pixel Circuit Compensating for TFTs Threshold-Voltage Shift and OLED Degradation for AMOLED. Journal of Display Technology, 2013, 9, 572-576.	1.3	20
44	Damage-Free Back Channel Wet-Etch Process in Amorphous Indiumâ€“Zinc-Oxide Thin-Film Transistors Using a Carbon-Nanofilm Barrier Layer. ACS Applied Materials & Interfaces, 2014, 6, 11318-11325.	4.0	20
45	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.	2.9	20
46	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.	2.7	20
47	Effect of Post Treatment For Cu-Cr Source/Drain Electrodes on a-IGZO TFTs. Materials, 2016, 9, 623.	1.3	20
48	Improving Thermal Stability of Solution-Processed Indium Zinc Oxide Thin-Film Transistors by Praseodymium Oxide Doping. ACS Applied Materials & Interfaces, 2018, 10, 28764-28771.	4.0	20
49	A Highly Stable Biside Gate Driver Integrated by IZO TFTs. IEEE Transactions on Electron Devices, 2014, 61, 3335-3338.	1.6	19
50	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.	0.9	19
51	High-performance hybrid white organic light-emitting diodes employing p-type interlayers. Journal of Industrial and Engineering Chemistry, 2015, 27, 240-244.	2.9	19
52	A Low-Power Ring Oscillator Using Pull-Up Control Scheme Integrated by Metalâ€“Oxide TFTs. IEEE Transactions on Electron Devices, 2017, 64, 4946-4951.	1.6	19
53	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.	1.2	19
54	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.	0.8	19

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55	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.	1.3	18
56	A novel nondestructive testing method for amorphous Siâ€“Snâ€“O films. Journal Physics D: Applied Physics, 2016, 49, 505102.	1.3	18
57	Improvement of Mobility and Stability in Oxide Thin-Film Transistors Using Triple-Stacked Structure. IEEE Electron Device Letters, 2016, 37, 57-59.	2.2	18
58	High-Resolution Flexible AMOLED Display Integrating Gate Driver by Metalâ€“Oxide TFTs. IEEE Electron Device Letters, 2018, 39, 1660-1663.	2.2	18
59	Mobility Enhancement in Amorphous In-Ga-Zn-O Thin-Film Transistor by Induced Metallic in Nanoparticles and Cu Electrodes. Nanomaterials, 2018, 8, 197.	1.9	18
60	The effect of charge transfer transition on the photostability of lanthanide-doped indium oxide thin-film transistors. Communications Materials, 2021, 2, .	2.9	18
61	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.	2.1	16
62	Flexible organic field-effect transistors with high-reliability gate insulators prepared by a room-temperature, electrochemical-oxidation process. RSC Advances, 2015, 5, 15695-15699.	1.7	16
63	High-mobility ZrInO thin-film transistor prepared by an all-DC-sputtering method at room temperature. Scientific Reports, 2016, 6, 25000.	1.6	16
64	Effect of Intrinsic Stress on Structural and Optical Properties of Amorphous Si-Doped SnO2 Thin-Film. Materials, 2017, 10, 24.	1.3	15
65	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.	2.2	15
66	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.	1.2	14
67	The effect of spacer in hybrid white organic light emitting diodes. Science Bulletin, 2014, 59, 3090-3097.	1.7	14
68	Reduced contact resistance of a-IGZO thin film transistors with inkjet-printed silver electrodes. Journal Physics D: Applied Physics, 2018, 51, 165103.	1.3	14
69	Low-Power Bi-Side Scan Driver Integrated by IZO TFTs Including a Clock-Controlled Inverter. Journal of Display Technology, 2014, 10, 523-525.	1.3	13
70	Highâ€mobility flexible thinâ€film transistors with a lowâ€temperature zirconiumâ€doped indium oxide channel layer. Physica Status Solidi - Rapid Research Letters, 2016, 10, 493-497.	1.2	13
71	A physics-based model of threshold voltage for amorphous oxide semiconductor thin-film transistors. AIP Advances, 2016, 6, .	0.6	11
72	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, .	1.5	11

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73	All-Aluminum Thin Film Transistor Fabrication at Room Temperature. Materials, 2017, 10, 222.	1.3	11
74	Islandâ€Like AZO/Al₂O₃ Bilayer Channel Structure for Thin Film Transistors. Advanced Materials Interfaces, 2017, 4, 1700063.	1.9	10
75	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.	0.8	9
76	High reliability amorphous oxide semiconductor thinâ€film transistors gated by buried thick aluminum. Physica Status Solidi - Rapid Research Letters, 2012, 6, 403-405.	1.2	9
77	Highly stable amorphous indiumâ€zincâ€oxide thinâ€film transistors with backâ€channel wetâ€etch process. Physica Status Solidi - Rapid Research Letters, 2014, 8, 176-181.	1.2	9
78	Low-temperature, high-stability, flexible thin-film transistors with a novel ScxIn1â^'xO3semiconductor. Journal Physics D: Applied Physics, 2016, 49, 24LT01.	1.3	9
79	24â€4: Flexible AMOLED based on Oxide TFT with High Mobility. Digest of Technical Papers SID International Symposium, 2017, 48, 342-344.	0.1	8
80	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.	1.6	8
81	Facilitation of transparent gas barrier using SiN x /a-IZO lamination for organic light emitting diodes. Organic Electronics, 2015, 24, 57-64.	1.4	6
82	Indiumâ€“Galliumâ€“Zincâ€“Oxide Thin-Film Transistors Based on Homojunctioned Structure Fabricated With a Self-Aligned Process. Journal of Display Technology, 2015, 11, 589-595.	1.3	6
83	A physics-based model of flat-band capacitance for metal oxide thin-film transistors. AIP Advances, 2018, 8, .	0.6	6
84	Dual Gate Indiumâ€“Zinc Oxide Thin-Film Transistors Based on Anodic Aluminum Oxide Gate Dielectrics. IEEE Transactions on Electron Devices, 2014, 61, 2448-2453.	1.6	5
85	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.	1.9	5
86	A low-power gate driver integrated by IZO-TFTs employing single negative power source. Semiconductor Science and Technology, 2018, 33, 065006.	1.0	5
87	A low-power D flip flop integrated by metal oxide thin film transistors employing internal feedback control. Semiconductor Science and Technology, 2018, 33, 115004.	1.0	5
88	Enhanced Negativeâ€Bias Illumination Temperature Stability of Praseodymiumâ€Doped InGaO Thinâ€Film Transistors. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000812.	0.8	5
89	Letter: A new compensation pixel circuit with metal oxide thinâ€film transistors for activeâ€matrix organic lightâ€emitting diode displays. Journal of the Society for Information Display, 2015, 23, 233-239.	0.8	4
90	Design of high speed gate driver employing IZO TFTs. Displays, 2015, 39, 93-99.	2.0	4

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91	Highly conductive AZO thin films obtained by rationally optimizing substrate temperature and oxygen partial pressure. Molecular Crystals and Liquid Crystals, 2017, 644, 190-196.	0.4	4
92	IZO Protected Silver Films Used as Anodes in Top-Emitting Organic LEDs. ECS Journal of Solid State Science and Technology, 2013, 2, R190-R195.	0.9	3
93	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.	0.9	3
94	16.2: A 4.8â€inch AMOLED Display Panel Driven by Stable Amorphous Inâ€Znâ€O Thinâ€Film Transistor. Digest of Technical Papers SID International Symposium, 2013, 44, 170-173.	0.1	3
95	20.4L: Lateâ€News Paper: A Flexible AMOLED Display on PEN Substrate Driven by Oxide Thinâ€Film Transistors. Digest of Technical Papers SID International Symposium, 2014, 45, 260-262.	0.1	3
96	High-speed low-power voltage-programmed driving scheme for AMOLED displays. Journal of Semiconductors, 2015, 36, 125005.	2.0	3
97	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.	0.8	3
98	Manchesterâ€encoded data transmission circuit integrated by metalâ€“oxide TFTs suitable for 13.56â€…MHz radioâ€frequency identification tag application. IET Circuits, Devices and Systems, 2018, 12, 771-776.	0.9	3
99	A Semi-Analytical Extraction Method for Interface and Bulk Density of States in Metal Oxide Thin-Film Transistors. Materials, 2018, 11, 416.	1.3	3
100	A 256 Ã— 256, 50-Î¼m Pixel Pitch OPD Image Sensor Based on an IZO TFT Backplane. IEEE Sensors Journal, 2021, 21, 20824-20832.	2.4	3
101	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.	1.4	3
102	A scan driver including light emission control integrated by metal-oxide thin-film transistors. Semiconductor Science and Technology, 2021, 36, 025006.	1.0	3
103	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.	0.8	2
104	A metal oxide TFT gate driver with a single negative power source employing a boosting module. Journal of Information Display, 2020, 21, 57-64.	2.1	2
105	An Analytical Frequency-Dependent Capacitance-Voltage Model for Metal Oxide Thin-Film Transistors. IEEE Transactions on Electron Devices, 2022, 69, 141-146.	1.6	2
106	Flexible amorphous oxide thin-film transistors on polyimide substrate for AMOLED. , 2014, , .		1
107	High performance and illumination stable In2O3 nanofibers-based field effect transistors by doping praseodymium. Surfaces and Interfaces, 2022, 29, 101781.	1.5	1
108	15.2: Invited Paper: Backâ€Channelâ€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.	0.1	0