Flexible metal-oxide devices made by room-temperatur sol–gel films

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Citation Report

#	Article	IF	Citations
3	Photobias Instability of High Performance Solution Processed Amorphous Zinc Tin Oxide Transistors. ACS Applied Materials & Samp; Interfaces, 2013, 5, 3255-3261.	8.0	61
4	Metal salt-derived In–Ga–Zn–O semiconductors incorporating formamide as a novel co-solvent for producing solution-processed, electrohydrodynamic-jet printed, high performance oxide transistors. Journal of Materials Chemistry C, 2013, 1, 4236.	5.5	73
5	29.4: <i>Invited Paper (i): Paper Electronics: A Challenge for the Future. Digest of Technical Papers SID International Symposium, 2013, 44, 365-367.</i>	0.3	4
7	Bonding and Structure of Ceramic-Ceramic Interfaces. Physical Review Letters, 2013, 111, 066103.	7.8	16
8	Co3O4 nanocrystals with predominantly exposed facets: synthesis, environmental and energy applications. Journal of Materials Chemistry A, 2013, 1, 14427.	10.3	147
9	Functionalized ZnO nanoparticles for thin-film transistors: support of ligand removal by non-thermal methods. Journal of Materials Chemistry C, 2013, 1, 3098.	<b>5.</b> 5	24
10	High-performance low-voltage organic transistor memories with room-temperature solution-processed hybrid nanolayer dielectrics. Journal of Materials Chemistry C, 2013, 1, 3291.	5 <b>.</b> 5	29
11	Graphene electrodes transfer-printed with a surface energy-mediated wet PDMS stamp: impact of Au doped-graphene for high performance soluble oxide thin-film transistors. Journal of Materials Chemistry C, 2013, 1, 5632.	5.5	15
12	Tunable near-infrared and visible-light transmittance in nanocrystal-in-glass composites. Nature, 2013, 500, 323-326.	27.8	742
13	Room temperature photo-induced, Eu3+-doped IGZO transparent thin films fabricated using sol–gel method. Journal of Nanostructure in Chemistry, 2013, 3, 1.	9.1	5
14	Boron-Doped Peroxo-Zirconium Oxide Dielectric for High-Performance, Low-Temperature, Solution-Processed Indium Oxide Thin-Film Transistor. ACS Applied Materials & Samp; Interfaces, 2013, 5, 8067-8075.	8.0	113
15	Synergistic Approach to High-Performance Oxide Thin Film Transistors Using a Bilayer Channel Architecture. ACS Applied Materials & Interfaces, 2013, 5, 7983-7988.	8.0	75
16	Solution-Processed Flexible Fluorine-doped Indium Zinc Oxide Thin-Film Transistors Fabricated on Plastic Film at Low Temperature. Scientific Reports, 2013, 3, 2085.	3.3	150
17	Electrolyte-Gated, High Mobility Inorganic Oxide Transistors from Printed Metal Halides. ACS Applied Materials & Samp; Interfaces, 2013, 5, 11498-11502.	8.0	67
18	Mechanisms of Zinc Oxide Nanocrystalline Thin Film Formation by Thermal Degradation of Metal-Loaded Hydrogels. Journal of Physical Chemistry C, 2013, 117, 25108-25117.	3.1	11
19	The Effect of Metal Composition on Bias Stability of Solution Processed Indium Oxide Based Thin Film Transistors. ECS Journal of Solid State Science and Technology, 2013, 2, Q200-Q204.	1.8	10
20	Solution-processed zinc-indium-tin oxide thin-film transistors for flat-panel displays. Applied Physics Letters, 2013, 103, .	3.3	26
21	Effects of O <sub>2</sub> plasma treatment on low temperature solution-processed zinc tin oxide thin film transistors. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1745-1749.	1.8	10

#	Article	IF	Citations
22	Highâ€Performance ZnO Transistors Processed Via an Aqueous Carbonâ€Free Metal Oxide Precursor Route at Temperatures Between 80–180 °C. Advanced Materials, 2013, 25, 4340-4346.	21.0	156
23	In/Ga-Free, Inkjet-Printed Charge Transfer Doping for Solution-Processed ZnO. ACS Applied Materials & Interfaces, 2013, 5, 9765-9769.	8.0	33
24	Flexible organic/inorganic heterojunction transistors with low operating voltage. Journal of Materials Chemistry C, 2013, 1, 7073.	5 <b>.</b> 5	14
25	Impact of UV/O3 treatment on solution-processed amorphous InGaZnO4 thin-film transistors. Journal of Applied Physics, 2013, 113, .	2.5	68
26	Graphene based field effect transistors: Efforts made towards flexible electronics. Solid-State Electronics, 2013, 89, 177-188.	1.4	85
27	High-performance low-temperature solution-processed InGaZnO thin-film transistors via ultraviolet-ozone photo-annealing. Applied Physics Letters, 2013, 102, .	3.3	72
28	Base-etch removal of a ligand shell in thin films of ZnO nanoparticles for electronic applications. Journal of Materials Chemistry C, 2013, 1, 7111.	<b>5.</b> 5	7
29	Molecular precursor derived and solution processed indium–zinc oxide as a semiconductor in a field-effect transistor device. Towards an improved understanding of semiconductor film composition. Journal of Materials Chemistry C, 2013, 1, 2577.	5 <b>.</b> 5	34
30	Universal Medium-Range Order of Amorphous Metal Oxides. Physical Review Letters, 2013, 111, 155502.	7.8	27
31	Low-Temperature Solution-Processed Zirconium Oxide Gate Insulators for Thin-Film Transistors. IEEE Transactions on Electron Devices, 2013, 60, 3413-3416.	3.0	35
32	Micro-patterned ZnO semiconductors for high performance thin film transistors via chemical imprinting with a PDMS stamp. Chemical Communications, 2013, 49, 2783.	4.1	14
33	Wet processing for the fabrication of ceramic thin films on plastics. Journal of Materials Research, 2013, 28, 673-688.	2.6	30
34	Ambient-Processable High Capacitance Hafnia-Organic Self-Assembled Nanodielectrics. Journal of the American Chemical Society, 2013, 135, 8926-8939.	13.7	69
35	Ultrathin amorphous zinc-tin-oxide buffer layer for enhancing heterojunction interface quality in metal-oxide solar cells. Energy and Environmental Science, 2013, 6, 2112.	30.8	160
36	Solution-processable metal oxide semiconductors for thin-film transistor applications. Chemical Society Reviews, 2013, 42, 6910.	38.1	250
37	Low-Temperature Metal-Oxide Thin-Film Transistors Formed by Directly Photopatternable and Combustible Solution Synthesis. ACS Applied Materials & Samp; Interfaces, 2013, 5, 3565-3571.	8.0	98
38	Toward Printed Integrated Circuits based on Unipolar or Ambipolar Polymer Semiconductors. Advanced Materials, 2013, 25, 4210-4244.	21.0	473
39	Enhanced Electrical Properties of Thin-Film Transistor with Self-Passivated Multistacked Active Layers. ACS Applied Materials & Samp; Interfaces, 2013, 5, 4190-4194.	8.0	36

#	ARTICLE	IF	CITATIONS
40	High-performance transparent and flexible inorganic thin film transistors: a facile integration of graphene nanosheets and amorphous InGaZnO. Journal of Materials Chemistry C, 2013, 1, 5064.	5.5	38
41	Oxygen "Getter―Effects on Microstructure and Carrier Transport in Low Temperature Combustion-Processed a-lnXZnO (X = Ga, Sc, Y, La) Transistors. Journal of the American Chemical Society, 2013, 135, 10729-10741.	13.7	174
42	Printed Indium Gallium Zinc Oxide Transistors. Self-Assembled Nanodielectric Effects on Low-Temperature Combustion Growth and Carrier Mobility. ACS Applied Materials & Diterfaces, 2013, 5, 11884-11893.	8.0	69
43	Investigation of tow-step electrical degradation behavior in a-InGaZnO thin-film transistors with Sm2O3 gate dielectrics. Applied Physics Letters, 2013, 103, .	3.3	12
44	High performance In 2O3 thin film transistors using chemically derived aluminum oxide dielectric. Applied Physics Letters, 2013, $103$ , .	3.3	168
45	Solution-processed indium gallium zinc oxide thin-film transistors with infrared irradiation annealing. Semiconductor Science and Technology, 2013, 28, 105002.	2.0	25
46	Paper No P35: Improved Stability of Solutionâ€Processed ZnO Thinâ€Film Transistor Postâ€Treated by Ultraviolet Annealing Step. Digest of Technical Papers SID International Symposium, 2013, 44, 119-122.	0.3	0
47	Metal-semiconductor hybrid thin films in field-effect transistors. Applied Physics Letters, 2013, 103, .	3.3	1
48	Solution-processed ZnO nanoparticle-based transistors via a room-temperature photochemical conversion process. Applied Physics Letters, 2013, 102, .	3.3	35
49	23.2:Invited Paper: Solution-processed Metal Oxide TFTs and Circuits on a Plastic by Photochemical Activation Process. Digest of Technical Papers SID International Symposium, 2013, 44, 271-274.	0.3	1
50	Paper No 7.3: Solutionâ€Processed Oxide Semiconductors for Highâ€Mobility Thinâ€Film Transistors. Digest of Technical Papers SID International Symposium, 2013, 44, 177-178.	0.3	0
51	Chemical composition and temperature dependent performance of ZnO-thin film transistors deposited by pulsed and continuous spray pyrolysis. Journal of Applied Physics, 2013, 114, .	2.5	11
52	Paper No P36: Optimization of H <sub>2</sub> O Annealing for Highâ€Performance Lowâ€Temperature Solutionâ€Processed Oxide Thinâ€Film Transistors. Digest of Technical Papers SID International Symposium, 2013, 44, 123-125.	0.3	0
53	Recent advances in low-temperature solution-processed oxide backplanes. Journal of Information Display, 2013, 14, 79-87.	4.0	44
54	Reversible UV induced metal–semiconductor transition in In2O3thin films prepared by autowave oxidation. Semiconductor Science and Technology, 2014, 29, 082001.	2.0	12
55	Preparation of [100] oriented SrTiO <sub>3</sub> thin films on flexible polymer sheets. Japanese Journal of Applied Physics, 2014, 53, 05FB06.	1.5	10
56	Inkjet-printed zinc-tin-oxide TFTs with a solution-processed hybrid dielectric layer. Journal of the Korean Physical Society, 2014, 65, 1435-1440.	0.7	0
57	Photoelectrical and microphysical properties of Sol-Gel derived IGZO thin films for printed TFTs. , 2014, , .		0

#	Article	IF	CITATIONS
58	Novel Gated-Multiprobe Method for Measuring a Back Electrode Effect in Amorphous Oxide-Based Thin-Film Transistors. IEEE Transactions on Electron Devices, 2014, 61, 3757-3761.	3.0	4
59	Low-temperature flexible piezoelectric AlN capacitor integrated on ultra-flexible poly-Si TFT for advanced tactile sensing. , 2014, , .		2
60	Facile passivation of solution-processed InZnO thin-film transistors by octadecylphosphonic acid self-assembled monolayers at room temperature. Applied Physics Letters, 2014, 104, .	3.3	32
61	Effect of sputter power on the photobias stability of zinc-tin-oxide field-effect transistors. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 011202.	1.2	9
62	Resistive Switching Behaviors In ZnO Thin Films Prepared By Photochemical Activation At Room Temperature. , 2014, , .		1
63	Significant roles of low-temperature post-metallization annealing in solution-processed oxide thin-film transistors. Applied Physics Letters, 2014, 105, .	3.3	24
64	NiO/Si heterostructures formed by UV oxidation of nickel deposited on Si substrates. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .	1.2	26
65	Indium tin oxide/InGaZnO bilayer stacks for enhanced mobility and optical stability in amorphous oxide thin film transistors. Applied Physics Letters, 2014, 105, .	3.3	24
66	Rapid low-temperature processing of metal-oxide thin film transistors with combined far ultraviolet and thermal annealing. Applied Physics Letters, 2014, $105$ , .	3.3	48
67	Origin of High Photoconductive Gain in Fully Transparent Heterojunction Nanocrystalline Oxide Image Sensors and Interconnects. Advanced Materials, 2014, 26, 7102-7109.	21.0	65
68	Light-induced hysteresis and recovery behaviors in photochemically activated solution-processed metal-oxide thin-film transistors. Applied Physics Letters, $2014, 105, \ldots$	3.3	24
69	<i>In-Situ</i> Metallic Oxide Capping for High Mobility Solution-Processed Metal-Oxide TFTs. IEEE Electron Device Letters, 2014, 35, 850-852.	3.9	26
70	Effect of antimony doping on the low-temperature performance of solution-processed indium oxide thin film transistors. Physica Status Solidi - Rapid Research Letters, 2014, 8, 924-927.	2.4	6
71	Study of the improvements in the electrical performance of solution-processed metal oxide thin-film transistors using self-assembled monolayers. , $2014$ , , .		1
72	Direct Laser Patterning of a Gas Sensor on Flexible Substrate. Procedia Engineering, 2014, 87, 899-902.	1.2	3
73	Effects of combined Ar/O <sub>2</sub> plasma and microwave irradiation on electrical performance and stability in solution-deposited amorphous InGaZnO thin-film transistors. Japanese Journal of Applied Physics, 2014, 53, 04EF12.	1.5	13
74	Fabrication of stacked logic circuits for printed integrated circuits. Japanese Journal of Applied Physics, 2014, 53, 05HB08.	1.5	6
<b>7</b> 5	Enhanced performance of solution-processed amorphous gallium-doped indium oxide thin-film transistors after hydrogen peroxide vapor treatment. Applied Physics Express, 2014, 7, 051101.	2.4	8

#	Article	IF	CITATIONS
76	Effect of UV light and low temperature on solution-processed, high-performance metal-oxide semiconductors and TFTs. , 2014, , .		0
77	UV-assisted rapid thermal annealing for solution-processed zinc oxide thin-film transistors. Semiconductor Science and Technology, 2014, 29, 095019.	2.0	21
78	Effect of Al concentration on the electrical characteristics of solution-processed Al doped ZnSnO thin film transistors. Ceramics International, 2014, 40, 8769-8774.	4.8	46
79	Polymer-Derived In-Situ Metal Matrix Composites Created by Direct Injection of a Liquid Polymer into Molten Magnesium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 551-554.	2,2	19
80	Novel synthesis and luminescence properties of t-LaVO <sub>4</sub> :Eu <sup>3+</sup> micro cube. CrystEngComm, 2014, 16, 152-158.	2.6	21
81	Effect of exposure to optical radiation and temperature on the electrical and optical properties of In2O3 films produced by autowave oxidation. Semiconductors, 2014, 48, 207-211.	0.5	2
82	Overview of electroceramic materials for oxide semiconductor thin film transistors. Journal of Electroceramics, 2014, 32, 117-140.	2.0	117
83	High-mobility transparent amorphous metal oxide/nanostructure composite thin film transistors with enhanced-current paths for potential high-speed flexible electronics. Journal of Materials Chemistry C, 2014, 2, 1201-1208.	5.5	11
84	Electrically Stable, Solution-Processed Amorphous Oxide IZO Thin-Film Transistors Through a UV-Ozone Assisted Sol-Gel Approach. IEEE Transactions on Electron Devices, 2014, 61, 1093-1100.	3.0	11
85	A Facile Solutionâ€Doping Method to Improve a Lowâ€Temperature Zinc Oxide Precursor: Towards Lowâ€Cost Electronics on Plastic Foil. Advanced Functional Materials, 2014, 24, 2537-2543.	14.9	10
86	Gate Capacitanceâ€Dependent Fieldâ€Effect Mobility in Solutionâ€Processed Oxide Semiconductor Thinâ€Film Transistors. Advanced Functional Materials, 2014, 24, 4689-4697.	14.9	84
87	Highly Uniform Resistive Switching Properties of Amorphous InGaZnO Thin Films Prepared by a Low Temperature Photochemical Solution Deposition Method. ACS Applied Materials & Samp; Interfaces, 2014, 6, 5012-5017.	8.0	117
88	Sol–Gel Solution-Deposited InGaZnO Thin Film Transistors. ACS Applied Materials & Amp; Interfaces, 2014, 6, 4428-4437.	8.0	99
89	Room-temperature preparation of metal-oxide nanostructures by DUV lithography from metal-oxo clusters. Journal of Materials Chemistry C, 2014, 2, 277-285.	5.5	48
90	Introduction to Printed Electronics. Springer Briefs in Electrical and Computer Engineering, 2014, , .	0.5	127
91	High Performance, Low Temperature Solution-Processed Barium and Strontium Doped Oxide Thin Film Transistors. Chemistry of Materials, 2014, 26, 1195-1203.	6.7	62
92	Chargeâ€Trap Flashâ€Memory Oxide Transistors Enabled by Copper–Zirconia Composites. Advanced Materials, 2014, 26, 7170-7177.	21.0	32
93	Aqueous Combustion Synthesis of Aluminum Oxide Thin Films and Application as Gate Dielectric in GZTO Solution-Based TFTs. ACS Applied Materials & Interfaces, 2014, 6, 19592-19599.	8.0	107

#	Article	IF	CITATIONS
94	Simple Method to Enhance Positive Bias Stress Stability of In–Ca–Zn–O Thin-Film Transistors Using a Vertically Graded Oxygen-Vacancy Active Layer. ACS Applied Materials & Third English (2014), 6, 21363-21368.	8.0	53
95	Sol–Gelâ€Derived Highâ€Performance Stacked Transparent Conductive Oxide Thin Films. Journal of the American Ceramic Society, 2014, 97, 3238-3243.	3.8	21
96	Solution-Processable LaZrOx/SiO2 Gate Dielectric at Low Temperature of 180 $\hat{A}^\circC$ for High-Performance Metal Oxide Field-Effect Transistors. ACS Applied Materials & Samp; Interfaces, 2014, 6, 18693-18703.	8.0	58
97	Formamide Mediated, Air-Brush Printable, Indium-Free Soluble Zn–Sn–O Semiconductors for Thin-Film Transistor Applications. ACS Applied Materials & Interfaces, 2014, 6, 18429-18434.	8.0	8
98	Effect of Nitrous Oxide High Pressure Annealing on the Performance of Low Temperature, Soluble-Based IZO Transistors. IEEE Electron Device Letters, 2014, 35, 455-457.	3.9	10
99	High-Mobility Solution-Processed Tin Oxide Thin-Film Transistors with High-Î <sup>o</sup> Alumina Dielectric Working in Enhancement Mode. ACS Applied Materials & Samp; Interfaces, 2014, 6, 20786-20794.	8.0	113
100	Semiconducting Polymers with Nanocrystallites Interconnected via Boron-Doped Carbon Nanotubes. Nano Letters, 2014, 14, 7100-7106.	9.1	17
101	Solution Processable Colloidal Nanoplates as Building Blocks for High-Performance Electronic Thin Films on Flexible Substrates. Nano Letters, 2014, 14, 6547-6553.	9.1	69
102	Threshold Voltage Extraction in the Saturation Regime Insensitive to the Contact Properties for Organic Thin-Film Transistors. Journal of Display Technology, 2014, 10, 615-618.	1.2	3
103	Bio-sorbable, liquid electrolyte gated thin-film transistor based on a solution-processed zinc oxide layer. Faraday Discussions, 2014, 174, 383-398.	3.2	29
104	Polymeric mold soft-patterned metal oxide field-effect transistors: critical factors determining device performance. Journal of Materials Chemistry C, 2014, 2, 8486-8491.	5 <b>.</b> 5	6
105	Low-temperature facile solution-processed gate dielectric for combustion derived oxide thin film transistors. RSC Advances, 2014, 4, 54729-54739.	3 <b>.</b> 6	44
106	Enhanced Electrical Characteristics and Stability via Simultaneous Ultraviolet and Thermal Treatment of Passivated Amorphous In–Ga–Zn–O Thin-Film Transistors. ACS Applied Materials & Interfaces, 2014, 6, 6399-6405.	8.0	67
107	Analytical Models for Delay and Power Analysis of Zero-V <sub>GS</sub> Load Unipolar Thin-Film Transistor Logic Circuits. IEEE Transactions on Electron Devices, 2014, 61, 3838-3844.	3.0	5
108	Printed low temperature metal oxide thin film transistors. , 2014, , .		0
109	A General Oneâ€Pot Strategy for the Synthesis of Highâ€Performance Transparentâ€Conductingâ€Oxide Nanocrystal Inks for Allâ€Solutionâ€Processed Devices. Angewandte Chemie - International Edition, 2015, 54, 462-466.	13.8	52
110	Sub-second photo-annealing of solution-processed metal oxide thin-film transistors via irradiation of intensely pulsed white light. RSC Advances, 2014, 4, 19375.	3.6	41
111	Modification of a polymer gate insulator by zirconium oxide doping for low temperature, high performance indium zinc oxide transistors. RSC Advances, 2014, 4, 45742-45748.	3.6	23

#	ARTICLE	IF	Citations
112	Highly stable solution-processed ZnO thin film transistors prepared via a simple Al evaporation process. Journal of Materials Chemistry C, 2014, 2, 1390-1395.	5 <b>.</b> 5	28
113	Low Voltage Organic/Inorganic Hybrid Complementary Inverter With Low Temperature All Solution Processed Semiconductor and Dielectric Layers. IEEE Electron Device Letters, 2014, 35, 542-544.	3.9	16
114	Monolithically patterned high mobility solution-processed metal-oxide TFTs with metallic capping layers. , 2014, , .		0
115	Direct Light Pattern Integration of Low-Temperature Solution-Processed All-Oxide Flexible Electronics. ACS Nano, 2014, 8, 9680-9686.	14.6	128
116	Activated Solutions Enabling Lowâ€Temperature Processing of Functional Ferroelectric Oxides for Flexible Electronics. Advanced Materials, 2014, 26, 1405-1409.	21.0	92
117	Effects of Ga:N Addition on the Electrical Performance of Zinc Tin Oxide Thin Film Transistor by Solution-Processing. ACS Applied Materials & Solution-Processing.	8.0	30
118	Facile preparation of yttrium and aluminum co-doped ZnO via a sol–gel route for photocatalytic hydrogen production. Journal of Materials Chemistry A, 2014, 2, 11040-11044.	10.3	74
119	Impact of the Cation Composition on the Electrical Performance of Solution-Processed Zinc Tin Oxide Thin-Film Transistors. ACS Applied Materials & Interfaces, 2014, 6, 14026-14036.	8.0	42
120	Effect Of Channel Layer Thickness On The Performance Of Indiumâ€"Zincâ€"Tin Oxide Thin Film Transistors Manufactured By Inkjet Printing. ACS Applied Materials & Samp; Interfaces, 2014, 6, 10941-10945.	8.0	69
121	Interrelation between Chemical, Electronic, and Charge Transport Properties of Solution-Processed Indium–Zinc Oxide Semiconductor Thin Films. Journal of Physical Chemistry C, 2014, 118, 12826-12836.	3.1	20
122	Review of solution-processed oxide thin-film transistors. Japanese Journal of Applied Physics, 2014, 53, 02BA02.	1.5	182
123	Two-component solution processing of oxide semiconductors for thin-film transistors via self-combustion reaction. Journal of Materials Chemistry C, 2014, 2, 4247-4256.	5 <b>.</b> 5	67
124	Low-temperature photo-activated inorganic electron transport layers for flexible inverted polymer solar cells. Applied Physics A: Materials Science and Processing, 2014, 116, 2087-2093.	2.3	3
125	Effects of contact resistance on the evaluation of charge carrier mobilities and transport parameters in amorphous zinc tin oxide thin-film transistors. Applied Physics A: Materials Science and Processing, 2014, 115, 1103-1107.	2.3	7
126	Low-temperature processing of inkjet-printed IZO thin-film transistors. Journal of the Korean Physical Society, 2014, 64, 701-705.	0.7	9
127	Improvement in Negative Bias Stress Stability of Solution-Processed Amorphous In–Ga–Zn–O Thin-Film Transistors Using Hydrogen Peroxide. ACS Applied Materials & Interfaces, 2014, 6, 3371-3377.	8.0	71
128	Enhanced mobility of solution-processed polycrystalline zinc tin oxide thin-film transistors via direct incorporation of water into precursor solution. Applied Physics Letters, 2014, 105, .	3.3	16
129	Solution-processed semiconducting aluminum-zinc-tin-oxide thin films and their thin-film transistor applications. Ceramics International, 2014, 40, 7829-7836.	4.8	10

#	ARTICLE	IF	CITATIONS
130	Fabrication of solution-processed amorphous indium zinc oxide thin-film transistors at low temperatures using deep-UV irradiation under wet conditions. Chemical Physics Letters, 2014, 597, 121-125.	2.6	14
131	An electroless-plating-like solution deposition approach for large-area flexible thin films of transition metal oxide nanocrystals. Journal of Materials Chemistry C, 2014, 2, 2266-2271.	5.5	9
132	Excellent resistive switching property and physical mechanism of amorphous TiO2 thin films fabricated by a low-temperature photochemical solution deposition method. Applied Surface Science, 2014, 311, 697-702.	6.1	35
133	Investigation of metal alloy reaction temperatures in solution-based AlZnSnO thin-film transistors. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2817-2822.	1.8	5
134	UVâ€Assisted Low Temperature Oxide Dielectric Films for TFT Applications. Advanced Materials Interfaces, 2014, 1, 1400206.	3.7	41
135	Defect-induced optical and electrical property modification in amorphous InGaZnO4 films. Journal of Non-Crystalline Solids, 2015, 426, 99-102.	3.1	1
136	Structural and electronic properties of indium-tin-oxide sol-gel films for various post-annealing treatment. Journal of the Korean Physical Society, 2015, 67, 563-567.	0.7	7
137	Sub-0.5 V Highly Stable Aqueous Salt Gated Metal Oxide Electronics. Scientific Reports, 2015, 5, 13088.	3.3	51
138	Synthesis of Large Area Graphene for High Performance in Flexible Optoelectronic Devices. Scientific Reports, 2015, 5, 16744.	3.3	107
139	Fabrication of source and drain regions of self-aligned ZrInZnO thin-film transistors using a solution of tin and poly(propylene carbonate). Japanese Journal of Applied Physics, 2015, 54, 106501.	1.5	3
140	Scalable Sub-micron Patterning of Organic Materials Toward High Density Soft Electronics. Scientific Reports, 2015, 5, 14520.	3.3	12
141	A tunable amorphous p-type ternary oxide system: The highly mismatched alloy of copper tin oxide. Journal of Applied Physics, 2015, 118, 105702.	2.5	5
142	Ar plasma treated ZnON transistor for future thin film electronics. Applied Physics Letters, 2015, 107, .	3.3	52
143	Room Temperature Oxide Deposition Approach to Fully Transparent, Allâ€Oxide Thinâ€Film Transistors. Advanced Materials, 2015, 27, 6090-6095.	21.0	57
144	Solutionâ€Processed Ultrathin Organic Semiconductor Film: Toward Allâ€Transparent Highly Stable Transistors. Advanced Electronic Materials, 2015, 1, 1500173.	5.1	11
145	Largeâ€Scale Precise Printing of Ultrathin Sol–Gel Oxide Dielectrics for Directly Patterned Solutionâ€Processed Metal Oxide Transistor Arrays. Advanced Materials, 2015, 27, 5043-5048.	21.0	117
146	Ink-Jet Printed CMOS Electronics from Oxide Semiconductors. Small, 2015, 11, 3591-3596.	10.0	70
147	UV-Ozone Process for Film Densification of Solution-Processed InGaZnO Thin-Film Transistors. Journal of Display Technology, 2015, 11, 6-12.	1.2	18

#	Article	IF	CITATIONS
148	Resistive switching behavior of photochemical activation solution-processed thin films at low temperatures for flexible memristor applications. Journal Physics D: Applied Physics, 2015, 48, 115101.	2.8	27
149	Near-infrared–driven decomposition of metal precursors yields amorphous electrocatalytic films. Science Advances, 2015, 1, e1400215.	10.3	48
150	Low-Impurity High-Performance Solution-Processed Metal Oxide Semiconductors via a Facile Redox Reaction. Chemistry of Materials, 2015, 27, 4713-4718.	6.7	34
151	Efficient Polymer Solar Cells Enabled by Low Temperature Processed Ternary Metal Oxide as Electron Transport Interlayer with Large Stoichiometry Window. ACS Applied Materials & Samp; Interfaces, 2015, 7, 11099-11106.	8.0	15
152	Aqueous Solution-Deposited Gallium Oxide Dielectric for Low-Temperature, Low-Operating-Voltage Indium Oxide Thin-Film Transistors: A Facile Route to Green Oxide Electronics. ACS Applied Materials & Amp; Interfaces, 2015, 7, 14720-14725.	8.0	60
153	A robust ionic liquid–polymer gate insulator for high-performance flexible thin film transistors. Journal of Materials Chemistry C, 2015, 3, 4239-4243.	5.5	25
154	Flexographyâ€Printed In <sub>2</sub> O <sub>3</sub> Semiconductor Layers for Highâ€Mobility Thinâ€Film Transistors on Flexible Plastic Substrate. Advanced Materials, 2015, 27, 7168-7175.	21.0	116
155	The effects of gallium on solution-derived indium oxide-based thin film transistors manufactured on display glass. RSC Advances, 2015, 5, 93779-93785.	3.6	7
156	Synthesis of graphene on ultra-smooth copper foils for large area flexible electronics. , 2015, , .		1
157	Independent chemical/physical role of combustive exothermic heat in solution-processed metal oxide semiconductors for thin-film transistors. Journal of Materials Chemistry C, 2015, 3, 1457-1462.	5.5	22
158	Improvement of air stability on solution-processed InZnO thin-film transistors by microwave irradiation and In:Zn composition ratio. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1719-1724.	1.8	4
159	Facile and Environmentally Friendly Solution-Processed Aluminum Oxide Dielectric for Low-Temperature, High-Performance Oxide Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2015, 7, 5803-5810.	8.0	139
160	Low-Temperature, Solution-Processed ZrO <sub>2</sub> :B Thin Film: A Bifunctional Inorganic/Organic Interfacial Glue for Flexible Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2015, 7, 4494-4503.	8.0	31
161	Photochemically Activated Flexible Metal-Oxide Transistors and Circuits Using Low Impurity Aqueous System. IEEE Electron Device Letters, 2015, 36, 162-164.	3.9	23
165	Sub-3 nm Co <sub>3</sub> O <sub>4</sub> Nanofilms with Enhanced Supercapacitor Properties. ACS Nano, 2015, 9, 1730-1739.	14.6	248
166	All Amorphous Oxide Bipolar Heterojunction Diodes from Abundant Metals. Advanced Electronic Materials, $2015,1,1400023.$	5.1	45
167	Oxygen plasma assisted high performance solution-processed Al2Ox gate insulator for combustion-processed InGaZnOx thin film transistors. Journal of Applied Physics, 2015, 117, .	2.5	22
169	Highly Stable and Imperceptible Electronics Utilizing Photoactivated Heterogeneous Solâ€Gel Metal–Oxide Dielectrics and Semiconductors. Advanced Materials, 2015, 27, 1182-1188.	21.0	127

#	Article	IF	CITATIONS
170	Ultraâ∈Flexible, â∈œInvisible―Thinâ∈Film Transistors Enabled by Amorphous Metal Oxide/Polymer Channel Layer Blends. Advanced Materials, 2015, 27, 2390-2399.	21.0	116
171	Printed Oxide Thin Film Transistors: A Mini Review. ECS Journal of Solid State Science and Technology, 2015, 4, P3044-P3051.	1.8	77
172	A General Route toward Complete Room Temperature Processing of Printed and High Performance Oxide Electronics. ACS Nano, 2015, 9, 3075-3083.	14.6	78
173	Correlation between alkaline-earth-metal dopants and threshold voltage (Vth)Âstability of solution-processed gallium indium oxide thin film transistors. Journal of Sol-Gel Science and Technology, 2015, 73, 260-264.	2.4	1
174	Monolithic Metal Oxide Transistors. ACS Nano, 2015, 9, 4288-4295.	14.6	29
175	Lowâ€Temperature Liquid Precursors of Crystalline Metal Oxides Assisted by Heterogeneous Photocatalysis. Advanced Materials, 2015, 27, 2608-2613.	21.0	36
176	Performance enhancement of p-type organic field-effect transistor through introducing organic buffer layers. Journal of Materials Science: Materials in Electronics, 2015, 26, 8301-8306.	2.2	6
177	Facile Routes To Improve Performance of Solution-Processed Amorphous Metal Oxide Thin Film Transistors by Water Vapor Annealing. ACS Applied Materials & Samp; Interfaces, 2015, 7, 13289-13294.	8.0	47
178	Non-laminated growth of chlorine-doped zinc oxide films by atomic layer deposition at low temperatures. Journal of Materials Chemistry C, 2015, 3, 8336-8343.	5.5	22
179	Flexible SiO <sub>2</sub> nanofilms assembled on poly(ethylene terephthalate) substrates through a room temperature fabrication process for nanoscale integration. Journal of Materials Chemistry C, 2015, 3, 1286-1293.	5.5	13
180	Deep ultraviolet laser direct write for patterning sol-gel InGaZnO semiconducting micro/nanowires and improving field-effect mobility. Scientific Reports, 2015, 5, 10490.	3.3	42
181	Direct patterning of sol–gel metal oxide semiconductor and dielectric films via selective surface wetting. RSC Advances, 2015, 5, 38125-38129.	3.6	40
182	Spray-combustion synthesis: Efficient solution route to high-performance oxide transistors. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3217-3222.	7.1	175
183	The annealing effects on the properties of solution-processed alumina thin film and its application in TFTs. Ceramics International, 2015, 41, S349-S355.	4.8	28
184	A flexible integrated photodetector system driven by on-chip microsupercapacitors. Nano Energy, 2015, 13, 131-139.	16.0	99
185	Low-temperature fabrication of high performance indium oxide thin film transistors. RSC Advances, 2015, 5, 37807-37813.	3.6	73
186	Rapid curing of solution-processed zinc oxide films by pulse-light annealing for thin-film transistor applications. Electronic Materials Letters, 2015, 11, 82-87.	2.2	18
187	Room-temperature electrically pumped near-infrared random lasing from high-quality m-plane ZnO-based metal-insulator-semiconductor devices. Nanoscale Research Letters, 2015, 10, 100.	5.7	14

#	Article	IF	CITATIONS
188	Crystal plane-dependent electrocatalytic activity of Co3O4 toward oxygen evolution reaction. Catalysis Communications, 2015, 67, 78-82.	3.3	93
189	High performance solution-deposited bilayer channel indium–zinc-oxide thin film transistors by low-temperature microwave annealing. Current Applied Physics, 2015, 15, S69-S74.	2.4	4
190	A review on the recent developments of solution processes for oxide thin film transistors. Semiconductor Science and Technology, 2015, 30, 064001.	2.0	83
191	Hydrogen Bistability as the Origin of Photoâ€Biasâ€Thermal Instabilities in Amorphous Oxide Semiconductors. Advanced Electronic Materials, 2015, 1, 1400006.	5.1	83
192	Grapheneâ€Skeleton Heatâ€Coordinated and Nanoamorphousâ€Surfaceâ€State Controlled Pseudoâ€Negativeâ€Photoconductivity of Tiny SnO <sub>2</sub> Nanoparticles. Advanced Materials, 2015, 27, 3525-3532.	21.0	35
193	Highly uniform resistive switching effect in amorphous Bi2O3 thin films fabricated by a low-temperature photochemical solution deposition method. Applied Physics A: Materials Science and Processing, 2015, 120, 379-384.	2.3	12
194	Inâ€Depth Studies on Rapid Photochemical Activation of Various Sol–Gel Metal Oxide Films for Flexible Transparent Electronics. Advanced Functional Materials, 2015, 25, 2807-2815.	14.9	172
196	Flexible, High-Speed CdSe Nanocrystal Integrated Circuits. Nano Letters, 2015, 15, 7155-7160.	9.1	52
197	Modulation of aqueous precursor solution temperature for the fabrication of high-performance metal oxide thin-film transistors. Applied Physics Express, 2015, 8, 081101.	2.4	5
198	Amorphous In–Ga–Zn Oxide Semiconducting Thin Films with High Mobility from Electrochemically Generated Aqueous Nanocluster Inks. Chemistry of Materials, 2015, 27, 5587-5596.	6.7	41
199	High mobility organic field-effect transistor based on water-soluble deoxyribonucleic acid via spray coating. Applied Physics Letters, 2015, 106, 043303.	3.3	24
200	Printed In-Ga-Zn-O drop-based thin-film transistors sintered using intensely pulsed white light. RSC Advances, 2015, 5, 78655-78659.	3.6	26
201	High Electron Mobility Thinâ€Film Transistors Based on Solutionâ€Processed Semiconducting Metal Oxide Heterojunctions and Quasiâ€Superlattices. Advanced Science, 2015, 2, 1500058.	11.2	134
202	Diazopyridine–Ni(ii) complexes exhibiting intra-chain ferromagnetic interaction after irradiation: formation of magnetic gel. Inorganic Chemistry Frontiers, 2015, 2, 917-926.	6.0	2
203	Eco-friendly water-induced aluminum oxide dielectrics and their application in a hybrid metal oxide/polymer TFT. RSC Advances, 2015, 5, 86606-86613.	3.6	65
204	Engineering of Flexo- and Gravure-Printed Indium–Zinc-Oxide Semiconductor Layers for High-Performance Thin-Film Transistors. IEEE Transactions on Electron Devices, 2015, 62, 2871-2877.	3.0	17
205	Ultraviolet photoconductivity of amorphous ZnAlSnO thin-film transistors. RSC Advances, 2015, 5, 56116-56120.	3.6	6
206	Metal Oxide Nanoparticle Engineering for Printed Electrochemical Applications. , 2015, , 1-29.		0

#	ARTICLE	IF	CITATIONS
207	Hexaaqua Metal Complexes for Low-Temperature Formation of Fully Metal Oxide Thin-Film Transistors. Chemistry of Materials, 2015, 27, 5808-5812.	6.7	77
208	Effect of UV irradiation on Cu2ZnSnS4 thin films prepared by the sol–gel sulfurization method. Journal of Alloys and Compounds, 2015, 652, 400-406.	5.5	7
209	Solution-Processed Transistors Using Colloidal Nanocrystals with Composition-Matched Molecular "Solders†Approaching Single Crystal Mobility. Nano Letters, 2015, 15, 6309-6317.	9.1	88
210	Fabrication of high-performance, low-temperature solution processed amorphous indium oxide thin-film transistors using a volatile nitrate precursor. Journal of Materials Chemistry C, 2015, 3, 854-860.	5.5	63
211	Solution processed F doped ZnO (ZnO:F) for thin film transistors and improved stability through co-doping with alkali metals. Journal of Materials Chemistry C, 2015, 3, 1787-1793.	5.5	64
212	Anion-controlled passivation effect of the atomic layer deposited ZnO films by F substitution to O-related defects on the electronic band structure for transparent contact layer of solar cell applications. Solar Energy Materials and Solar Cells, 2015, 132, 403-409.	6.2	47
214	Solution Combustion Synthesis: Applications in Oxide Electronics., 2016,,.		1
215	Determination of Insulator-to-Semiconductor Transition in Sol-Gel Oxide Semiconductors Using Derivative Spectroscopy. Materials, 2016, 9, 6.	2.9	9
216	Facile synthesis of Y2S3/ZnO nanocomposite and its catalytic performance in the degradation of Methylene Blue using UV-A/solar illumination. Journal of Water Process Engineering, 2016, 12, 32-40.	5.6	9
217	Polymerâ€modified solutionâ€processed metal oxide dielectrics on aluminum foil substrate for flexible organic transistors. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2509-2517.	1.8	4
218	Metal Oxide Transistors via Polyethylenimine Doping of the Channel Layer: Interplay of Doping, Microstructure, and Charge Transport. Advanced Functional Materials, 2016, 26, 6179-6187.	14.9	77
219	Chemically Functionalized, Wellâ€Dispersed Carbon Nanotubes in Lithiumâ€Doped Zinc Oxide for Lowâ€Cost, Highâ€Performance Thinâ€Film Transistors. Small, 2016, 12, 1859-1865.	10.0	4
220	Recent Progress in Materials and Devices toward Printable and Flexible Sensors. Advanced Materials, 2016, 28, 4415-4440.	21.0	643
221	Alâ€Doped ZnO Transistors Processed from Solution at 120 °C. Advanced Electronic Materials, 2016, 2, 1600070.	5.1	42
222	Fully Solutionâ€Processed Conductive Films Based on Colloidal Copper Selenide Nanosheets for Flexible Electronics. Advanced Functional Materials, 2016, 26, 3670-3677.	14.9	46
223	Piezopotential-Programmed Multilevel Nonvolatile Memory As Triggered by Mechanical Stimuli. ACS Nano, 2016, 10, 11037-11043.	14.6	37
224	On-glass operational amplifier using solution-processed a-IGZO TFTs. , 2016, , .		4
225	A room-temperature magnetic semiconductor from a ferromagnetic metallic glass. Nature Communications, 2016, 7, 13497.	12.8	71

#	Article	IF	CITATIONS
226	Photochemical solution processing of films of metastable phases for flexible devices: the $\hat{l}^2$ -Bi2O3 polymorph. Scientific Reports, 2016, 6, 39561.	3.3	38
227	High Critical Current Density of YBa2Cu3O7â°'x Superconducting Films Prepared through a DUV-assisted Solution Deposition Process. Scientific Reports, 2016, 6, 38257.	3.3	11
228	Metal oxide semiconductor thin-film transistors for flexible electronics. Applied Physics Reviews, 2016, 3, 021303.	11.3	511
229	Periodically pulsed wet annealing approach for low-temperature processable amorphous InGaZnO thin film transistors with high electrical performance and ultrathin thickness. Scientific Reports, 2016, 6, 26287.	3.3	15
230	Hybrid Cluster Precursors of the LaZrO Insulator for Transistors: Properties of High-Temperature-Processed Films and Structures of Solutions, Gels and Solids. Scientific Reports, 2016, 6, 29682.	3.3	11
231	Flexible InGaZnO TFT devices obtained via humid-UV irradiation with an aqueous-fluoroalcoholic precursor. Flexible and Printed Electronics, $2016$ , $1$ , $045001$ .	2.7	6
232	Water-Mediated Photochemical Treatments for Low-Temperature Passivation of Metal-Oxide Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2016, 8, 10403-10412.	8.0	57
233	Eco-friendly, solution-processed In-W-O thin films and their applications in low-voltage, high-performance transistors. Journal of Materials Chemistry C, 2016, 4, 4478-4484.	5.5	45
234	Resistive Switching Properties and Failure Behaviors of (Pt, Cu)/Amorphous ZrO2/Pt Sandwich Structures. Journal of Materials Science and Technology, 2016, 32, 676-680.	10.7	27
235	Monolithic Integration and Design of Solution-Processed Metal-Oxide Circuitry in Organic Photosensor Arrays. IEEE Electron Device Letters, 2016, 37, 671-673.	3.9	12
236	Metal-oxide thin-film transistor-based pH sensor with a silver nanowire top gate electrode. Journal of the Korean Physical Society, 2016, 68, 901-907.	0.7	3
237	Boosting Responsivity of Organic–Metal Oxynitride Hybrid Heterointerface Phototransistor. ACS Applied Materials & Diterfaces, 2016, 8, 14665-14670.	8.0	25
238	Patterning of amorphous-InGaZnO thin-film transistors by stamping of surface-modified polydimethylsiloxane. RSC Advances, 2016, 6, 43147-43151.	3.6	5
239	Low-Temperature Oxidation-Free Selective Laser Sintering of Cu Nanoparticle Paste on a Polymer Substrate for the Flexible Touch Panel Applications. ACS Applied Materials & Samp; Interfaces, 2016, 8, 11575-11582.	8.0	160
240	Influence of oxygen/argon reaction gas ratio on optical and electrical characteristics of amorphous IGZO thin films coated by HiPIMS process. Surface and Coatings Technology, 2016, 303, 209-214.	4.8	22
241	Carbohydrate-Assisted Combustion Synthesis To Realize High-Performance Oxide Transistors. Journal of the American Chemical Society, 2016, 138, 7067-7074.	13.7	61
242	Ultralow‶emperature Sol–Gel Route to Metal Oxide Semiconductors for Soft Platforms. Advanced Materials Interfaces, 2016, 3, 1600664.	3.7	9
243	The 2016 oxide electronic materials and oxide interfaces roadmap. Journal Physics D: Applied Physics, 2016, 49, 433001.	2.8	266

#	Article	IF	CITATIONS
244	Characterization and mechanism analysis of AgBr mixed cuboid WO <sub>3</sub> rods with enhanced photocatalytic activity. RSC Advances, 2016, 6, 93436-93444.	3.6	21
245	Fully spin-coated memory TFT. , 2016, , .		0
246	Effects of Rare-Earth Element Dopants in High-Mobility InOx-Based Thin-Film Transistors. IEEE Electron Device Letters, 2016, 37, 1139-1142.	3.9	12
247	Self-powered fiber-shaped wearable omnidirectional photodetectors. Nano Energy, 2016, 30, 173-179.	16.0	82
248	Low-Temperature Photochemical Conversion of Organometallic Precursor Layers to Titanium(IV) Oxide Thin Films. Chemistry of Materials, 2016, 28, 7715-7724.	6.7	23
249	High-Performance Flexible Hybrid Photosensor Circuits Made by Low-Temperature Solution Processed Metal-Oxide and Organic TFTs. ECS Transactions, 2016, 75, 223-226.	0.5	0
250	Controllable Formation of Zinc Oxide Micro―and Nanostructures via DUV Direct Patterning. Advanced Materials Interfaces, 2016, 3, 1600373.	3.7	18
251	Surface-tension-tailored aqueous ink for low-temperature deposition of high-kHfO2thin film. Japanese Journal of Applied Physics, 2016, 55, 080310.	1.5	1
252	Photoresponses of InSnGaO and InGaZnO thin-film transistors. RSC Advances, 2016, 6, 83529-83533.	3.6	7
253	Linear topology in amorphous metal oxide electrochromic networks obtained via low-temperature solution processing. Nature Materials, 2016, 15, 1267-1273.	27.5	155
254	Building devices from colloidal quantum dots. Science, 2016, 353, .	12.6	996
255	Self-Aligned Coplanar Top Gate In-Ga-ZnO Thin-Film Transistors Exposed to Various DUV Irradiation Energies. IEEE Transactions on Electron Devices, 2016, , 1-5.	3.0	7
256	High Mobility Flexible Amorphous IGZO Thin-Film Transistors with a Low Thermal Budget Ultra-Violet Pulsed Light Process. ACS Applied Materials & Samp; Interfaces, 2016, 8, 34513-34519.	8.0	67
257	Synergistic effects of water addition and step heating on the formation of solution-processed zinc tin oxide thin films: towards high-mobility polycrystalline transistors. Nanotechnology, 2016, 27, 465204.	2.6	3
258	High-resolution electrohydrodynamic inkjet printing of stretchable metal oxide semiconductor transistors with high performance. Nanoscale, 2016, 8, 17113-17121.	5.6	97
259	Amorphous p-type AlSnO thin film by a combustion solution process. Surface and Coatings Technology, 2016, 304, 525-529.	4.8	2
260	Indiumâ€Free Fully Transparent Electronics Deposited Entirely by Atomic Layer Deposition. Advanced Materials, 2016, 28, 7736-7744.	21.0	41
261	Low-Temperature Photochemically Activated Amorphous Indium-Gallium-Zinc Oxide for Highly Stable Room-Temperature Gas Sensors. ACS Applied Materials & Interfaces, 2016, 8, 20192-20199.	8.0	68

#	Article	IF	CITATIONS
262	Identification of dipole disorder in low temperature solution processed oxides: its utility and suppression for transparent high performance solution-processed hybrid electronics. Chemical Science, 2016, 7, 6337-6346.	7.4	41
263	Modulation of physical properties of oxide thin films by multiple fields. Chinese Physics B, 2016, 25, 067303.	1.4	3
265	A review of multi-stacked active-layer structures for solution-processed oxide semiconductor thin-film transistors. Journal of Information Display, 2016, 17, 93-101.	4.0	75
266	A solution-processed silicon oxide gate dielectric prepared at a low temperature via ultraviolet irradiation for metal oxide transistors. Journal of Materials Chemistry C, 2016, 4, 10486-10493.	5.5	30
267	Directly drawn ZnO semiconductors and MWCNT/PSS electrodes via electrohydrodynamic jet printing for use in thin-film transistors: The ideal combination for reliable device performances. Organic Electronics, 2016, 39, 272-278.	2.6	25
268	Low-Temperature Chemical Transformations for High-Performance Solution-Processed Oxide Transistors. Chemistry of Materials, 2016, 28, 8305-8313.	6.7	61
269	Extremely Low-Cost, Scalable Oxide Semiconductors Employing Poly(acrylic acid)-Decorated Carbon Nanotubes for Thin-Film Transistor Applications. ACS Applied Materials & Interfaces, 2016, 8, 29858-29865.	8.0	4
270	Solution-processed indium-free ZnO/SnO <sub>2</sub> bilayer heterostructures as a low-temperature route to high-performance metal oxide thin-film transistors with excellent stabilities. Journal of Materials Chemistry C, 2016, 4, 11298-11304.	5.5	41
272	Li-Assisted Low-Temperature Phase Transitions in Solution-Processed Indium Oxide Films for High-Performance Thin Film Transistor. Scientific Reports, 2016, 6, 25079.	3.3	28
273	UV-Mediated Photochemical Treatment for Low-Temperature Oxide-Based Thin-Film Transistors. ACS Applied Materials & Diterfaces, 2016, 8, 31100-31108.	8.0	61
274	High mobility and high stability glassy metal-oxynitride materials and devices. Scientific Reports, 2016, 6, 23940.	3.3	24
275	High-Performance Solution-Processed Zinc–Tin-Oxide Thin-Film Transistors Employing Ferroelectric Copolymers Fabricated at Low Temperature for Transparent Flexible Displays. IEEE Electron Device Letters, 2016, 37, 1586-1589.	3.9	21
276	Organic core-sheath nanowire artificial synapses with femtojoule energy consumption. Science Advances, 2016, 2, e1501326.	10.3	406
277	Carrier-suppressing effect of Hf in InZnO thin film transistors using a solution process. , 2016, , .		0
278	Electrical stability enhancement of GelnGaO thin-film transistors by solution-processed Li-doped yttrium oxide passivation. Journal Physics D: Applied Physics, 2016, 49, 285103.	2.8	4
279	Ultrahigh Detective Heterogeneous Photosensor Arrays with Inâ€Pixel Signal Boosting Capability for Largeâ€Area and Skinâ€Compatible Electronics. Advanced Materials, 2016, 28, 3078-3086.	21.0	76
280	Wafer-Scale Microwire Transistor Array Fabricated via Evaporative Assembly. ACS Applied Materials & Lamp; Interfaces, 2016, 8, 15543-15550.	8.0	7
281	Two-dimensional CdS intercalated ZnO nanorods: a concise study on interfacial band structure modification. RSC Advances, 2016, 6, 52395-52402.	3.6	12

#	Article	IF	CITATIONS
282	Chemically robust solution-processed indium zinc oxide thin film transistors fabricated by back channel wet-etched Mo electrodes. RSC Advances, 2016, 6, 53310-53318.	3.6	12
283	Performance improvement for printed indium gallium zinc oxide thin-film transistors with a preheating process. RSC Advances, 2016, 6, 41439-41446.	3.6	20
284	High-Performance Inkjet-Printed Indium-Gallium-Zinc-Oxide Transistors Enabled by Embedded, Chemically Stable Graphene Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 17428-17434.	8.0	62
285	Reduction of activation temperature at $150 \hat{A}^{\circ} \text{C}$ for IGZO films with improved electrical performance via UV-thermal treatment. Journal of Information Display, 2016, 17, 73-78.	4.0	33
286	Combustion synthesized indium-tin-oxide (ITO) thin film for source/drain electrodes in all solution-processed oxide thin-film transistors. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	20
287	Advanced photo-annealing of indium zinc oxide films for thin-film transistors using pulse UV light. Journal of Information Display, 2016, 17, 1-7.	4.0	26
288	Low-temperature, solution-processed indium-oxide thin-film transistors fabricated by using an ultraviolet-ozone treatment. Journal of the Korean Physical Society, 2016, 68, 971-974.	0.7	3
289	Extremely Thin <scp><scp>Al</scp></scp> <sub>2</sub> <scp>O</scp> <sub>3</sub> Surfaceâ€Passivated Nanocrystalline <scp><scp>ZnO</scp></scp> Thinâ€Film Transistors Designed for Low Process Temperature. Journal of the American Ceramic Society, 2016, 99, 1305-1310.	3.8	6
290	lonic Liquid Activation of Amorphous Metalâ€Oxide Semiconductors for Flexible Transparent Electronic Devices. Advanced Functional Materials, 2016, 26, 2820-2825.	14.9	46
291	Solutionâ€Processed Allâ€Oxide Transparent Highâ€Performance Transistors Fabricated by Sprayâ€Combustion Synthesis. Advanced Electronic Materials, 2016, 2, 1500427.	5.1	101
292	Direct-Write X-ray Nanopatterning: A Proof of Concept Josephson Device on Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+Î</sub> Superconducting Oxide. Nano Letters, 2016, 16, 1669-1674.	9.1	15
293	A Simple Approach Low-Temperature Solution Process for Preparation of Bismuth-Doped ZnO Nanorods and Its Application in Hybrid Solar Cells. Journal of Physical Chemistry C, 2016, 120, 771-780.	3.1	31
294	Spectroscopic ellipsometry investigation on the excimer laser annealed indium thin oxide sol–gel films. Current Applied Physics, 2016, 16, 145-149.	2.4	21
295	Rational Design of ZnO:H/ZnO Bilayer Structure for High-Performance Thin-Film Transistors. ACS Applied Materials & Design of Language 1988.	8.0	76
296	In <sub>2</sub> O <sub>3</sub> Thin-Film Transistors via Inkjet Printing for Depletion-Load nMOS Inverters. IEEE Electron Device Letters, 2016, 37, 445-448.	3.9	20
297	Photo-patternable high-k ZrOx dielectrics prepared using zirconium acrylate for low-voltage-operating organic complementary inverters. Organic Electronics, 2016, 33, 40-47.	2.6	23
298	Transparent megahertz circuits from solution-processed composite thin films. Nanoscale, 2016, 8, 7978-7983.	5.6	3
299	Metal oxides for optoelectronic applications. Nature Materials, 2016, 15, 383-396.	27.5	1,203

#	Article	IF	CITATIONS
300	Photo-Patternable ZnO Thin Films Based on Cross-Linked Zinc Acrylate for Organic/Inorganic Hybrid Complementary Inverters. ACS Applied Materials & Samp; Interfaces, 2016, 8, 5499-5508.	8.0	45
301	Rational Hydrogenation for Enhanced Mobility and High Reliability on ZnO-based Thin Film Transistors: From Simulation to Experiment. ACS Applied Materials & Diterfaces, 2016, 8, 5408-5415.	8.0	30
302	Effects of structural modification via high-pressure annealing on solution-processed InGaO films and thin-film transistors. Journal Physics D: Applied Physics, 2016, 49, 075112.	2.8	15
303	Interface location-controlled indium gallium zinc oxide thin-film transistors using a solution process. Journal Physics D: Applied Physics, 2016, 49, 085301.	2.8	3
304	One-dimensional InGaZnO field-effect transistor on a polyimide wire substrate for an electronic textile. Journal of the Korean Physical Society, 2016, 68, 599-603.	0.7	9
305	Solution-processed lithium-doped zinc oxide thin-film transistors at low temperatures between 100 and 300°C. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	21
306	Suppressing the Coffee-Ring Effect in Semitransparent MnO <sub>2</sub> Film for a High-Performance Solar-Powered Energy Storage Window. ACS Applied Materials & Solar-Powered Energy Storage Window.	8.0	26
307	Instability in an amorphous In–Ga–Zn–O field effect transistor upon water exposure. Journal Physics D: Applied Physics, 2016, 49, 055102.	2.8	5
308	The pressure induced twisted distortion in the flexible oxide Tc2O7. CrystEngComm, 2016, 18, 328-333.	2.6	5
309	Electrohydrodynamic Jet Printed Indium–Zinc–Oxide Thin-Film Transistors. Journal of Display Technology, 2016, 12, 3-7.	1.2	11
310	Solution based zinc tin oxide TFTs: the dual role of the organic solvent. Journal Physics D: Applied Physics, 2017, 50, 065106.	2.8	28
311	Redox Chloride Elimination Reaction: Facile Solution Route for Indiumâ€Free, Lowâ€Voltage, and Highâ€Performance Transistors. Advanced Electronic Materials, 2017, 3, 1600513.	5.1	66
312	Organic vapor-jet-based route for solvent-free additive formation of oxide semiconductors. Organic Electronics, 2017, 43, 235-239.	2.6	2
313	2D Insulator–Metal Transition in Aerosolâ€Jetâ€Printed Electrolyteâ€Gated Indium Oxide Thin Film Transistors. Advanced Electronic Materials, 2017, 3, 1600369.	5.1	38
314	C-Axis oriented crystalline IGZO thin-film transistors by magnetron sputtering. Journal of Materials Chemistry C, 2017, 5, 2388-2396.	5.5	23
315	Fully solution-processed metal oxide thin-film transistors via a low-temperature aqueous route. Ceramics International, 2017, 43, 6130-6137.	4.8	48
316	Ladder-type silsesquioxane copolymer gate dielectrics for gating solution-processed IGZO field-effect transistors. Organic Electronics, 2017, 43, 41-46.	2.6	12
317	Schottky diode behaviour with excellent photoresponse in NiO/FTO heterostructure. Applied Surface Science, 2017, 418, 328-334.	6.1	68

#	Article	IF	CITATIONS
318	Room-Temperature Routes Toward the Creation of Zinc Oxide Films from Molecular Precursors. ACS Omega, 2017, 2, 98-104.	3.5	2
319	Electronic Devices for Humanâ€Machine Interfaces. Advanced Materials Interfaces, 2017, 4, 1600709.	3.7	76
321	Far-UV Annealed Inkjet-Printed In <sub>2</sub> O <sub>3</sub> Semiconductor Layers for Thin-Film Transistors on a Flexible Polyethylene Naphthalate Substrate. ACS Applied Materials & Samp; Interfaces, 2017, 9, 8774-8782.	8.0	71
322	Photochemical Activation of Electrospun In <sub>2</sub> O <sub>3</sub> Nanofibers for High-Performance Electronic Devices. ACS Applied Materials & Devices, 2017, 9, 10805-10812.	8.0	66
323	Interface Engineering of Metal Oxide Semiconductors for Biosensing Applications. Advanced Materials Interfaces, 2017, 4, 1700020.	3.7	72
324	Abnormal hump in capacitance–voltage measurements induced by ultraviolet light in a-IGZO thin-film transistors. Applied Physics Letters, 2017, 110, .	3.3	17
325	Lowâ€Temperatureâ€Processed Printed Metal Oxide Transistors Based on Pure Aqueous Inks. Advanced Functional Materials, 2017, 27, 1606062.	14.9	71
326	A solution-processed quaternary oxide system obtained at low-temperature using a vertical diffusion technique. Scientific Reports, 2017, 7, 43216.	3.3	31
327	Flexible substrate compatible solution processed P-N heterojunction diodes with indium-gallium-zinc oxide and copper oxide. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 218, 64-73.	3.5	15
328	Automated room temperature optical absorbance CO sensor based on In-doped ZnO nanorod. Sensors and Actuators B: Chemical, 2017, 248, 140-152.	7.8	46
329	Sol-gel metal oxide dielectrics for all-solution-processed electronics. Materials Science and Engineering Reports, 2017, 114, 1-22.	31.8	180
330	Quasi-Two-Dimensional Metal Oxide Semiconductors Based Ultrasensitive Potentiometric Biosensors. ACS Nano, 2017, 11, 4710-4718.	14.6	79
331	Electrical and chemical stability engineering of solution-processed indium zinc oxide thin film transistors via a synergistic approach of annealing duration and self-combustion process. Ceramics International, 2017, 43, 8956-8962.	4.8	11
332	Reduced water vapor transmission rates of low-temperature solution-processed metal oxide barrier films via ultraviolet annealing. Applied Surface Science, 2017, 414, 262-269.	6.1	2
333	Direct growth of MoS <sub>2</sub> single crystals on polyimide substrates. 2D Materials, 2017, 4, 021028.	4.4	39
334	Review of flexible and transparent thin-film transistors based on zinc oxide and related materials. Chinese Physics B, 2017, 26, 047307.	1.4	46
335	Study of different 3-aminopropyl triethoxysilane (APTES) concentration on TiO2 particles based IDE for cervical cancer detection. AIP Conference Proceedings, 2017, , .	0.4	2
336	UV-Sintered Low-Temperature Solution-Processed SnO <sub>2</sub> as Robust Electron Transport Layer for Efficient Planar Heterojunction Perovskite Solar Cells. ACS Applied Materials & Discrete Solar Cells. ACS Access Access Access & Discrete Solar Cells. ACS Access & Discrete Solar Cells. ACS Access	8.0	123

#	Article	IF	CITATIONS
337	Improvement in the Performance of Sol–Gel Processed In <sub>2</sub> O <sub>3</sub> Thin-Film Transistor Depending on Sb Dopant Concentration. IEEE Electron Device Letters, 2017, 38, 1027-1030.	3.9	18
338	Thread‣ike CMOS Logic Circuits Enabled by Reelâ€Processed Singleâ€Walled Carbon Nanotube Transistors via Selective Doping. Advanced Materials, 2017, 29, 1701822.	21.0	37
339	Immobilization of Sn–O–Zn coupled oxide nanoparticles on glass surface for photocatalytic degradation of Reactive Blue: sol–gel preparation using chloride precursors and citric acid as chelating agent. Journal of Materials Science: Materials in Electronics, 2017, 28, 14026-14032.	2.2	4
340	All-sputtered, flexible, bottom-gate IGZO/Al (sub>2O(sub>3 bi-layer thin film transistors on PEN fabricated by a fully room temperature process. Journal of Materials Chemistry C, 2017, 5, 7043-7050.	5.5	56
341	Brainâ€Inspired Photonic Neuromorphic Devices using Photodynamic Amorphous Oxide Semiconductors and their Persistent Photoconductivity. Advanced Materials, 2017, 29, 1700951.	21.0	346
342	Electronic transport parameters of indium zinc oxide thin films after Al2O3/HfO2 top-dielectric formation annealing. Microelectronic Engineering, 2017, 178, 164-167.	2.4	3
343	Schottky barrier diodes based on room temperature fabricated amorphous zinc tin oxide thin films. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700210.	1.8	22
344	High-performance InOx/GaOx bilayer channel thin-film transistors made using persistent high-surface-energy induced by photochemical activation. Journal of Alloys and Compounds, 2017, 723, 627-632.	5.5	9
345	Solution-processed organic–inorganic hybrid CMOS inverter exhibiting a high gain reaching 890. Organic Electronics, 2017, 48, 127-131.	2.6	17
346	Atomic layer deposition deposited high dielectric constant ( $\hat{l}^e$ ) ZrAlOx gate insulator enabling high performance ZnSnO thin film transistors. Superlattices and Microstructures, 2017, 109, 852-859.	3.1	6
347	Enhanced Electrical Performance and Stability in Zinc Oxynitride Thin-Film Transistors via Sequential Ultraviolet and Thermal Treatment. IEEE Electron Device Letters, 2017, 38, 883-886.	3.9	4
348	The role of oxygen in dramatically enhancing the electrical properties of solution-processed Zn–Sn–O thin-film transistors. Journal of Materials Chemistry C, 2017, 5, 6521-6526.	5.5	14
349	Effect of Li-doping on low temperature solution-processed indium–zinc oxide thin film transistors. Thin Solid Films, 2017, 641, 19-23.	1.8	24
350	Low-temperature, high-mobility, solution-processed metal oxide semiconductors fabricated with oxygen radical assisted perchlorate aqueous precursors. Chemical Communications, 2017, 53, 6436-6439.	4.1	7
351	An all-inkjet-printed flexible UV photodetector. Nanoscale, 2017, 9, 8580-8585.	5.6	49
352	Sol-gel derived Hf- and Mg-doped high-performance ZnO thin film transistors. Journal of Alloys and Compounds, 2017, 720, 230-238.	<b>5.</b> 5	25
353	Enhancement of adjustable localized surface plasmon resonance in ZnO nanocrystals via a dual doping approach. Science Bulletin, 2017, 62, 693-699.	9.0	16
354	Effects of interface energy modification in solution-processed In2O3 thin film transistors for sensing applications. Sensors and Actuators A: Physical, 2017, 263, 772-777.	4.1	2

#	Article	IF	CITATIONS
355	Highly conductive AZO thin films obtained by rationally optimizing substrate temperature and oxygen partial pressure. Molecular Crystals and Liquid Crystals, 2017, 644, 190-196.	0.9	4
356	Largeâ€Area Schottky Barrier Transistors Based on Vertically Stacked Graphene–Metal Oxide Heterostructures. Advanced Functional Materials, 2017, 27, 1700651.	14.9	26
357	Heterojunction oxide thin-film transistors with unprecedented electron mobility grown from solution. Science Advances, 2017, 3, e1602640.	10.3	148
358	Exploring the Leidenfrost Effect for the Deposition of Highâ€Quality In <sub>2</sub> O <sub>3</sub> Layers via Spray Pyrolysis at Low Temperatures and Their Application in High Electron Mobility Transistors. Advanced Functional Materials, 2017, 27, 1606407.	14.9	43
359	Photochemical solution deposition of $\hat{l}^2$ -Bi2O3 thin films. Journal of Sol-Gel Science and Technology, 2017, 81, 355-361.	2.4	7
360	Inkjet-Printed In-Ga-Zn Oxide Thin-Film Transistors with Laser Spike Annealing. Journal of Electronic Materials, 2017, 46, 4497-4502.	2.2	18
361	Solution-processed gadolinium doped indium-oxide thin-film transistors with oxide passivation. Applied Physics Letters, 2017, 110, .	3.3	52
362	Unraveling the Issue of Ag Migration in Printable Source/Drain Electrodes Compatible with Versatile Solution-Processed Oxide Semiconductors for Printed Thin-Film Transistor Applications. ACS Applied Materials & Diterfaces, 2017, 9, 14058-14066.	8.0	12
363	Multifunctional Organicâ€Semiconductor Interfacial Layers for Solutionâ€Processed Oxideâ€Semiconductor Thinâ€Film Transistor. Advanced Materials, 2017, 29, 1607055.	21.0	47
364	Rapid laser-induced photochemical conversion of sol–gel precursors to In <sub>2</sub> O <sub>3</sub> layers and their application in thin-film transistors. Journal of Materials Chemistry C, 2017, 5, 3673-3677.	5.5	33
365	Shape-controlled synthesis of monodispersed beta-gallium oxide crystals by a simple precipitation technique. Ceramics International, 2017, 43, 6430-6436.	4.8	22
366	Comparative Study of Antimony Doping Effects on the Performance of Solution-Processed ZIO and ZTO Field-Effect Transistors. ACS Applied Materials & Samp; Interfaces, 2017, 9, 10904-10913.	8.0	14
367	Modulationâ€Doped In <sub>2</sub> O <sub>3</sub> /ZnO Heterojunction Transistors Processed from Solution. Advanced Materials, 2017, 29, 1605837.	21.0	96
368	Solution Processable Metal Oxide Thin Film Deposition and Material Growth for Electronic and Photonic Devices. Advanced Materials Interfaces, 2017, 4, 1600610.	3.7	70
369	Gate- and Light-Tunable pn Heterojunction Microwire Arrays Fabricated via Evaporative Assembly. ACS Applied Materials & Samp; Interfaces, 2017, 9, 3857-3864.	8.0	6
370	Tuning the electrical performance of metal oxide thin-film transistors via dielectric interface trap passivation and graded channel modulation doping. Journal of Materials Chemistry C, 2017, 5, 1206-1215.	5.5	9
371	The effect of NaCl on room-temperature-processed indium oxide nanoparticle thin films for printed electronics. Applied Surface Science, 2017, 396, 912-919.	6.1	9
372	Strong Influence of Humidity on Low-Temperature Thin-Film Fabrication via Metal Aqua Complex for High Performance Oxide Semiconductor Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2017, 9, 548-557.	8.0	28

#	Article	IF	CITATIONS
373	Nonuniform Composition Profiles in Amorphous Multimetal Oxide Thin Films Deposited from Aqueous Solution. ACS Applied Materials & Solution.	8.0	7
374	Ultraviolet-assisted annealing for low-temperature solution-processed p-type gallium tin oxide (GTO) transparent semiconductor thin films. Materials Science in Semiconductor Processing, 2017, 71, 441-446.	4.0	10
375	Boosting Electrical Performance of High-l <sup>o</sup> Nanomultilayer Dielectrics and Electronic Devices by Combining Solution Combustion Synthesis and UV Irradiation. ACS Applied Materials & Samp; Interfaces, 2017, 9, 40428-40437.	8.0	53
376	Effects of channel thickness on oxide thin film transistor with double-stacked channel layer. Journal of the Korean Physical Society, 2017, 71, 561-564.	0.7	3
377	Ultraviolet-assisted direct patterning and low-temperature formation of flexible ZrO <sub>2</sub> resistive switching arrays on PET/ITO substrates. Nanotechnology, 2017, 28, 485707.	2.6	9
378	Performance Enhancement of Solutionâ€Derived Zinc–Tin–Oxide Thin Film Transistors by Lowâ€Temperature Microwave Irradiation. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700350.	1.8	5
379	Wide-spectral/dynamic-range skin-compatible phototransistors enabled by floated heterojunction structures with surface functionalized SWCNTs and amorphous oxide semiconductors. Nanoscale, 2017, 9, 16711-16721.	5.6	22
380	Role of Combustion Chemistry in Low-Temperature Deposition of Metal Oxide Thin Films from Solution. Chemistry of Materials, 2017, 29, 9480-9488.	6.7	30
381	Enhanced electrical stability of nitrate ligand-based hexaaqua complexes solution-processed ultrathin a-IGZO transistors. Journal Physics D: Applied Physics, 2017, 50, 485107.	2.8	6
382	Solution-processed metal oxide arrays using femtosecond laser ablation and annealing for thin-film transistors. Journal of Materials Chemistry C, 2017, 5, 9273-9280.	5 <b>.</b> 5	36
383	Scaling behavior of fully spin-coated TFT. AIP Conference Proceedings, 2017, , .	0.4	3
384	Water-vapor assisted photochemical fabrication of YBa2Cu3O7-x superconducting films with high critical current density. Journal of Alloys and Compounds, 2017, 727, 1036-1043.	5.5	2
385	Ultralow-Temperature Solution-Processed Aluminum Oxide Dielectrics via Local Structure Control of Nanoclusters. ACS Applied Materials & Samp; Interfaces, 2017, 9, 35114-35124.	8.0	44
386	Nanoscale Ferromagnetic Cobaltâ€Doped ZnO Structures Formed by Deepâ€UV Directâ€Patterning. Advanced Materials Interfaces, 2017, 4, 1700738.	3.7	6
387	Room-Temperature Activation of InGaZnO Thin-Film Transistors via He <sup>+</sup> Irradiation. ACS Applied Materials & Samp; Interfaces, 2017, 9, 35125-35132.	8.0	12
388	Water-Soluble Epitaxial NaCl Thin Film for Fabrication of Flexible Devices. Scientific Reports, 2017, 7, 8716.	3.3	27
389	Fast and slow transient charging of Oxide Semiconductor Transistors. Scientific Reports, 2017, 7, 11850.	3.3	10
390	Low-Temperature Postfunctionalization of Highly Conductive Oxide Thin-Films toward Solution-Based Large-Scale Electronics. ACS Applied Materials & Solution-Based Large-Scale Electronics. ACS Applied Materials & Solution-Based Large-Scale Electronics. ACS Applied Materials & Solution-Based Large-Scale Electronics.	8.0	29

#	Article	IF	CITATIONS
391	Highâ€Throughput Electrical Potential Depthâ€Profiling in Air. Advanced Materials Interfaces, 2017, 4, 1700136.	3.7	5
392	Pâ€33: Highâ€Mobility CdSe Thinâ€Film Transistors and Circuits by Solâ€gel Method. Digest of Technical Papers SID International Symposium, 2017, 48, 1350-1352.	0.3	1
393	Solution Combustion Synthesis: Lowâ€Temperature Processing for pâ€Type Cu:NiO Thin Films for Transparent Electronics. Advanced Materials, 2017, 29, 1701599.	21.0	145
394	Roomâ€Temperature Processing of Printed Oxide FETs Using Ultraviolet Photonic Curing. Advanced Electronic Materials, 2017, 3, 1600476.	5.1	29
395	Metal Oxides as Efficient Charge Transporters in Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1602803.	19.5	147
396	High Rate and Long Cycle Life of a CNT/rGO/Si Nanoparticle Composite Anode for Lithiumâ€lon Batteries. Particle and Particle Systems Characterization, 2017, 34, 1700141.	2.3	38
397	Silicon Cations Intermixed Indium Zinc Oxide Interface for High-Performance Thin-Film Transistors Using a Solution Process. ACS Applied Materials & Samp; Interfaces, 2017, 9, 29849-29856.	8.0	14
398	Room-temperature UV-ozone assisted solution process for zirconium oxide films with high dielectric properties. Ceramics International, 2017, 43, 15205-15213.	4.8	34
399	Low-Temperature Solution-Based In <sub>2</sub> O <sub>3</sub> Channel Formation for Thin-Film Transistors Using a Visible Laser-Assisted Combustion Process. IEEE Electron Device Letters, 2017, 38, 1259-1262.	3.9	16
400	Photodecomposition of Metal Nitrate and Chloride Compounds Yields Amorphous Metal Oxide Films. Journal of the American Chemical Society, 2017, 139, 18174-18177.	13.7	17
401	Solution-based process with thermal UV treatment for fabrication of piezoelectric PZT films for an actuator array at temperatures under 450 ${\hat {\sf A}}^{\circ}{\sf C}$ . Sensors and Actuators A: Physical, 2017, 267, 287-292.	4.1	6
402	lced photochemical reduction to synthesize atomically dispersed metals by suppressing nanocrystal growth. Nature Communications, 2017, 8, 1490.	12.8	322
403	Low-Temperature Fabrication of Amorphous Zinc-Tin-Oxide Thin Film Transistors with In-Situ Annealing Process. ECS Journal of Solid State Science and Technology, 2017, 6, P728-P732.	1.8	2
404	Flexible diodes for radio frequency (RF) electronics: a materials perspective. Semiconductor Science and Technology, 2017, 32, 123002.	2.0	64
405	Properties of solution-processed MgInZnO semiconductor thin films and photodetectors fabricated at a low temperature using UV-assisted thermal annealing. Ceramics International, 2017, 43, 11874-11878.	4.8	17
406	Inkjet printing of oxide thin film transistor arrays with small spacing with polymer-doped metal nitrate aqueous ink. Journal of Materials Chemistry C, 2017, 5, 7495-7503.	5.5	36
407	Solution-processed laminated ZrO2/Al2O3 dielectric for low-voltage indium zinc oxide thin-film transistors. Journal of Sol-Gel Science and Technology, 2017, 81, 570-575.	2.4	9
408	Solution-Based Fabrication of Polycrystalline Si Thin-Film Transistors from Recycled Polysilanes. ACS Sustainable Chemistry and Engineering, 2017, 5, 5642-5645.	6.7	10

#	Article	IF	CITATIONS
409	Bipolar Resistive Switching Characteristics of HfO2/TiO2/HfO2 Trilayer-Structure RRAM Devices on Pt and TiN-Coated Substrates Fabricated by Atomic Layer Deposition. Nanoscale Research Letters, 2017, 12, 393.	5.7	64
410	Flexible Ionicâ€Electronic Hybrid Oxide Synaptic TFTs with Programmable Dynamic Plasticity for Brainâ€Inspired Neuromorphic Computing. Small, 2017, 13, 1701193.	10.0	152
411	UV-assisted low-temperature sol–gel deposition of Pb(Zr0.4Ti0.6)O3 film and its photoelectrical properties. Journal of Sol-Gel Science and Technology, 2017, 83, 647-652.	2.4	13
412	Solutionâ€processed highâ€ <i>k</i> oxide dielectric via deep ultraviolet and rapid thermal annealing for highâ€performance MoS <sub>2</sub> FETs. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600619.	1.8	5
413	Organic strain sensor comprised of heptazole-based thin film transistor and Schottky diode. Organic Electronics, 2017, 40, 24-29.	2.6	7
414	Recent Progress in the Development of Printed Thinâ€Film Transistors and Circuits with Highâ€Resolution Printing Technology. Advanced Materials, 2017, 29, 1602736.	21.0	243
415	Inert gas annealing effect in solution-processed amorphous indium-gallium-zinc-oxide thin-film transistors. Journal of the Korean Physical Society, 2017, 71, 209-214.	0.7	3
416	Low-Temperature, Solution-Processed, Transparent Zinc Oxide-Based Thin-Film Transistors for Sensing Various Solvents. Materials, 2017, 10, 234.	2.9	13
417	Frequency-Stable Ionic-Type Hybrid Gate Dielectrics for High Mobility Solution-Processed Metal-Oxide Thin-Film Transistors. Materials, 2017, 10, 612.	2.9	9
418	Resistive Switching Characteristics of Flexible TiO <sub>2</sub> Thin Film Fabricated by Deep Ultraviolet Photochemical Solution Method. IEEE Electron Device Letters, 2017, 38, 1528-1531.	3.9	26
420	Low temperature solution processed high- $\hat{\mathbb{Q}}$ zirconium oxide gate insulator by Broadband-UV annealing. Organic Electronics, 2018, 57, 341-344.	2.6	6
421	Recent Advances of Solution-Processed Metal Oxide Thin-Film Transistors. ACS Applied Materials & Interfaces, 2018, 10, 25878-25901.	8.0	183
422	Synthesis by Low Temperature Solution Processing of Ferroelectric Perovskite Oxide Thin Films as Candidate Materials for Photovoltaic Applications. , 2018, , 45-81.		2
423	Study on properties of Ga/F-co-doped ZnO thin films prepared using atomic layer deposition. Thin Solid Films, 2018, 660, 913-919.	1.8	18
424	Cyclical Annealing Technique To Enhance Reliability of Amorphous Metal Oxide Thin Film Transistors. ACS Applied Materials & Eamp; Interfaces, 2018, 10, 25866-25870.	8.0	15
425	Flexible CMOS integrated circuits based on carbon nanotubes with sub-10 ns stage delays. Nature Electronics, 2018, 1, 191-196.	26.0	135
426	Printed Thin-Film Transistors: Research from China. ACS Applied Materials & Samp; Interfaces, 2018, 10, 25902-25924.	8.0	65
427	Low-temperature fabrication of solution-processed hafnium oxide gate insulator films using a thermally purified solution process. Journal of Materials Chemistry C, 2018, 6, 4928-4935.	5.5	31

#	ARTICLE	IF	CITATIONS
428	Nontoxic, Ecoâ€friendly Fully Waterâ€Induced Ternary Zr–Gd–O Dielectric for Highâ€Performance Transistors and Unipolar Inverters. Advanced Electronic Materials, 2018, 4, 1800100.	5.1	62
429	Metal Composition and Polyethylenimine Doping Capacity Effects on Semiconducting Metal Oxide–Polymer Blend Charge Transport. Journal of the American Chemical Society, 2018, 140, 5457-5473.	13.7	39
430	Highâ€Performance Solutionâ€Processed IGZO Thinâ€Film Transistors with Al <sub>2</sub> O <sub>3</sub> /BN Composite Dielectrics Fabricated at Low Temperature. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700802.	1.8	6
431	High-Resolution Inkjet-Printed Oxide Thin-Film Transistors with a Self-Aligned Fine Channel Bank Structure. ACS Applied Materials & Structure.	8.0	14
432	Hybrid cluster precursors of the LaZrO insulator for transistors: lowering the processing temperature. Scientific Reports, 2018, 8, 5934.	3.3	8
433	High-performance and scalable metal-chalcogenide semiconductors and devices via chalco-gel routes. Science Advances, 2018, 4, eaap9104.	10.3	53
434	Tuning of physical and electrochemical properties of nanocrystalline tungsten oxide through ultraviolet photoactivation. Electrochimica Acta, 2018, 272, 135-143.	5.2	8
435	Amorphous-cathode-route towards low temperature SOFC. Sustainable Energy and Fuels, 2018, 2, 862-875.	4.9	20
436	Integrated Tin Monoxide P-Channel Thin-Film Transistors for Digital Circuit Applications. IEEE Transactions on Electron Devices, 2018, 65, 514-519.	3.0	11
437	Development of extremely low temperature processed oxide thin film transistors via atmospheric steam reforming treatment: Interface, surface, film curing. Journal of Alloys and Compounds, 2018, 744, 23-33.	5.5	6
438	High-performance flexible oxide TFTs: optimization of a-IGZO film by modulating the voltage waveform of pulse DC magnetron sputtering without post treatment. Journal of Materials Chemistry C, 2018, 6, 2522-2532.	5 <b>.</b> 5	38
439	Improved Charge Injection of Metal Oxide Thinâ€Film Transistors by Stacked Electrodes of Indium Tin Oxide Nanoparticles and Silver Nanowires. Advanced Electronic Materials, 2018, 4, 1700440.	5.1	12
440	Suppression of persistent photo-conductance in solution-processed amorphous oxide thin-film transistors. Applied Physics Letters, 2018, 112, .	3.3	29
441	The zinc-loss effect and mobility enhancement of DUV-patterned sol–gel IGZO thin-film transistors. Semiconductor Science and Technology, 2018, 33, 035003.	2.0	6
442	Oxide-based thin film transistors for flexible electronics. Journal of Semiconductors, 2018, 39, 011005.	3.7	34
443	Curvature effects on the electronic and transport properties of semiconductor films. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 99, 304-309.	2.7	8
444	High-Mobility and Hysteresis-Free Flexible Oxide Thin-Film Transistors and Circuits by Using Bilayer Sol–Gel Gate Dielectrics. ACS Applied Materials & Interfaces, 2018, 10, 2679-2687.	8.0	71
445	Evolution of nanomechanical properties and crystallinity of individual titanium dioxide nanotube resonators. Nanotechnology, 2018, 29, 085702.	2.6	6

#	Article	IF	CITATIONS
446	Optimized Activation of Solutionâ€Processed Amorphous Oxide Semiconductors for Flexible Transparent Conductive Electrodes. Advanced Electronic Materials, 2018, 4, 1700386.	5.1	12
447	High-Performance Quantum Dot Thin-Film Transistors with Environmentally Benign Surface Functionalization and Robust Defect Passivation. ACS Applied Materials & Samp; Interfaces, 2018, 10, 3739-3749.	8.0	23
448	Solution-processed ternary p-type CuCrO <sub>2</sub> semiconductor thin films and their application in transistors. Journal of Materials Chemistry C, 2018, 6, 1393-1398.	5.5	51
449	A high speed PE-ALD ZnO Schottky diode rectifier with low interface-state density. Journal Physics D: Applied Physics, 2018, 51, 065102.	2.8	5
450	Highly stable low-temperature aqueous solution-processed oxide thin-film transistors by the hydrogen injection and oxidation method. Flexible and Printed Electronics, 2018, 3, 025005.	2.7	7
451	The Effects of N <sub>2</sub> O Plasma Treatment on the Device Performance of Solution-Processed a-InMgZnO Thin-Film Transistors. IEEE Transactions on Electron Devices, 2018, 65, 136-141.	3.0	8
452	Transparent and Flexible Zinc Tin Oxide Thin Film Transistors and Inverters using Low-pressure Oxygen Annealing Process. Journal of the Korean Physical Society, 2018, 72, 1073-1077.	0.7	5
453	Monodisperse YVO 4:Eu 3+ nanospindles: Rapid converted growth and luminescence properties. Materials Research Bulletin, 2018, 105, 149-153.	5.2	12
454	Nitroacetylacetone as a Cofuel for the Combustion Synthesis of High-Performance Indium–Gallium–Zinc Oxide Transistors. Chemistry of Materials, 2018, 30, 3323-3329.	6.7	35
455	Water-based processed and alkoxide-based processed indium oxide thin-film transistors at different annealing temperatures. Chinese Physics B, 2018, 27, 048504.	1.4	7
456	Employment of rapid thermal annealing for solution-processed InGaZnO thin film transistors. Journal of Materials Science: Materials in Electronics, 2018, 29, 8660-8665.	2.2	3
457	Ca-Doped CuO Diffusion Barrier for High-Performance <italic>a</italic> -IGZO Transistors With Cu-Based Source/Drain Material. IEEE Transactions on Electron Devices, 2018, 65, 1383-1390.	3.0	6
458	High performance printed oxide field-effect transistors processed using photonic curing. Nanotechnology, 2018, 29, 235205.	2.6	19
459	High-performing ultrafast transparent photodetector governed by the pyro–phototronic effect. Nanoscale, 2018, 10, 6928-6935.	5.6	63
460	Roll-to-roll processing of film substrates for hybrid integrated flexible electronics. Flexible and Printed Electronics, 2018, 3, 014002.	2.7	68
461	Facile Room Temperature Routes to Improve Performance of IGZO Thin-Film Transistors by an Ultrathin Al <sub>2</sub> O <sub>3</sub> Passivation Layer. IEEE Transactions on Electron Devices, 2018, 65, 537-541.	3.0	10
462	Low-temperature fabrication of sputtered high- $\langle i \rangle$ k< $\langle i \rangle$ HfO2 gate dielectric for flexible a-IGZO thin film transistors. Applied Physics Letters, 2018, 112, .	3.3	84
463	InGaZnO transistor based on porous Ag nanowire-functionalized gate electrode for detection of bio-relevant molecules. Sensors and Actuators B: Chemical, 2018, 254, 36-43.	7.8	7

#	Article	IF	Citations
464	Dualâ€Fiber Approach toward Flexible Multifunctional Hybrid Materials. Advanced Functional Materials, 2018, 28, 1704274.	14.9	26
465	The effect of solvent water content on the dielectric properties of Al2O3 films grown by atmospheric pressure mist-CVD. Ceramics International, 2018, 44, 459-463.	4.8	14
466	Anticancer drug delivery systems based on inorganic nanocarriers with fluorescent tracers. AICHE Journal, 2018, 64, 835-859.	3.6	28
467	Effect of Atomic Layer Deposition Temperature on the Growth Orientation, Morphology, and Electrical, Optical, and Band-Structural Properties of ZnO and Fluorine-Doped ZnO Thin Films. Journal of Physical Chemistry C, 2018, 122, 377-385.	3.1	22
468	Solution processed Li <sub>5</sub> AlO <sub>4</sub> dielectric for low voltage transistor fabrication and its application in metal oxide/quantum dot heterojunction phototransistors. Journal of Materials Chemistry C, 2018, 6, 790-798.	5.5	30
469	ZnO Nanofiber Thinâ€Film Transistors with Lowâ€Operating Voltages. Advanced Electronic Materials, 2018, 4, 1700336.	5.1	32
470	Recent Progress of Textileâ€Based Wearable Electronics: A Comprehensive Review of Materials, Devices, and Applications. Small, 2018, 14, 1703034.	10.0	470
471	Low-temperature photochemical activation of sol-gel titanium dioxide films for efficient planar heterojunction perovskite solar cells. Journal of Alloys and Compounds, 2018, 735, 224-233.	5 <b>.</b> 5	14
472	Low-temperature crystallization of solution-derived metal oxide thin films assisted by chemical processes. Chemical Society Reviews, 2018, 47, 291-308.	38.1	132
473	Synthesis and Properties of a Photopatternable Lithiumâ€lon Conducting Solid Electrolyte. Advanced Materials, 2018, 30, 1703772.	21.0	19
474	Synthesis, Giant Dielectric, and Pyroelectric Response of [001]-Oriented Pr3+ Doped Pb(Mg1/3Nb2/3)O3-PbTiO3 Ferroelectric Nano-Films Grown on Si Substrates. Materials, 2018, 11, 2392.	2.9	12
475	Solution Processed Alternating Organic/Inorganic Multilayer for OLED Encapsulation. ECS Transactions, 2018, 88, 121-128.	0.5	1
476	Low-temperature combustion synthesis and UV treatment processed p-type Li:NiO <sub>x</sub> active semiconductors for high-performance electronics. Journal of Materials Chemistry C, 2018, 6, 12584-12591.	5.5	38
477	Vacuum Ultraviolet-Assisted Sol-Gel Processing of Zn, Sn, Zn-Sn Oxide Thin Films for OLED Encapsulation. ECS Transactions, 2018, 88, 399-408.	0.5	1
478	Low-Temperature Solution-Processable Functional Oxide Materials for Printed Electronics., 0,,.		0
479	Reduced Contact Resistance Between Metal and n-Ge by Insertion of ZnO with Argon Plasma Treatment. Nanoscale Research Letters, 2018, 13, 237.	5.7	9
480	Piezophototronic Effect Modulated Multilevel Current Amplification from Highly Transparent and Flexible Device Based on Zinc Oxide Thin Film. Small, 2018, 14, e1804016.	10.0	15
481	Aqueous Solution Processing of Combustible Precursor Compounds into Amorphous Indium Gallium Zinc Oxide (IGZO) Semiconductors for Thin Film Transistor Applications. Chemistry - an Asian Journal, 2018, 13, 3912-3919.	3.3	10

#	Article	IF	CITATIONS
482	High-Performance All-Solution-Processed Flexible Photodetector Arrays Based on Ultrashort Channel Amorphous Oxide Semiconductor Transistors. ACS Applied Materials & Samp; Interfaces, 2018, 10, 40631-40640.	8.0	36
483	Pâ€1.10: Solutionâ€processed metal oxide semiconductors fabricated with oxygen radical assisting perchlorate aqueous precursors through a new lowâ€temperature reaction route. Digest of Technical Papers SID International Symposium, 2018, 49, 547-550.	0.3	0
484	$\label{eq:uv} \text{UV/ozone-process-assisted low-temperature SnO2 thin-film transistors.}, 2018, , .$		0
485	Effects of Interfacial Passivation on the Electrical Performance, Stability, and Contact Properties of Solution Process Based ZnO Thin Film Transistors. Materials, 2018, 11, 1761.	2.9	18
486	High-Throughput Open-Air Plasma Activation of Metal-Oxide Thin Films with Low Thermal Budget. ACS Applied Materials & Discrete Samp; Interfaces, 2018, 10, 37223-37232.	8.0	13
487	Enhanced electrical properties in solution-processed InGaZnO thin-film transistors by viable hydroxyl group transfer process. Japanese Journal of Applied Physics, 2018, 57, 05GC02.	1.5	1
488	Effects of Unusual Gate Current on the Electrical Properties of Oxide Thin-Film Transistors. Scientific Reports, 2018, 8, 13905.	3.3	16
489	Influence of irradiation atmospheres on the performance of ultraviolet-assisted solution-processed NbZnSn oxide thin film transistors. Thin Solid Films, 2018, 667, 1-6.	1.8	1
490	High-Performance Thin Film Transistor with an Neodymium-Doped Indium Zinc Oxide/Al2O3 Nanolaminate Structure Processed at Room Temperature. Materials, 2018, 11, 1871.	2.9	4
491	Selective UV–O3treatment for indium zinc oxide thin film transistors with solution-based multiple active layer. Japanese Journal of Applied Physics, 2018, 57, 06KB01.	1.5	2
492	Scalable, High-Performance Printed InO <sub><i>x</i></sub> Transistors Enabled by Ultraviolet-Annealed Printed High- <i>k</i> AlO <sub><i>x</i></sub> Gate Dielectrics. ACS Applied Materials & Alocamp; Interfaces, 2018, 10, 37277-37286.	8.0	32
493	Direct Laser Writing of Crystallized TiO <sub>2</sub> and TiO <sub>2</sub> /Carbon Microstructures with Tunable Conductive Properties. Advanced Materials, 2018, 30, e1805093.	21.0	37
494	Resistive switching IGZO micro-arrays realized through UV assisted photochemical solution method. Journal of Sol-Gel Science and Technology, 2018, 88, 601-608.	2.4	10
495	Simple and reliable direct patterning method for carbon-free solution-processed metal oxide TFTs. Scientific Reports, 2018, 8, 12825.	3.3	25
496	Solution-based SnGaO thin-film transistors for Zn- and In-free oxide electronic devices. Applied Physics Letters, 2018, 113, .	3.3	22
497	Solution-processed oxide thin film transistors on shape memory polymer enabled by photochemical self-patterning. Journal of Materials Research, 2018, 33, 2454-2462.	2.6	22
498	High-Quality Solution-Processed Metal-Oxide Gate Dielectrics Realized With a Photo-Activated Metal-Oxide Nanocluster Precursor. IEEE Electron Device Letters, 2018, 39, 1668-1671.	3.9	6
499	Lead Zirconium Titanate Films and Devices Made by a Low-Temperature Solution-Based Process., 2018,,		0

#	Article	IF	CITATIONS
500	Flexible Polymeric Substrates for Electronic Applications. Polymer Reviews, 2018, 58, 630-667.	10.9	73
501	A selectively processible instant glue passivation layer for indium gallium zinc oxide thin-film transistors fabricated at low temperature. Journal of Materials Chemistry C, 2018, 6, 6187-6193.	5 <b>.</b> 5	23
502	Extraordinary plasticity of an inorganic semiconductor in darkness. Science, 2018, 360, 772-774.	12.6	103
503	High- <i>k</i> Gate Dielectrics for Emerging Flexible and Stretchable Electronics. Chemical Reviews, 2018, 118, 5690-5754.	47.7	530
504	Reliable peripheral anchor-assisted transfer printing of ultrathin SiO2 for a transparent and flexible IGZO-based inverter. Microelectronic Engineering, 2018, 197, 15-22.	2.4	5
505	Novel Plasma-Assisted Low-Temperature-Processed SnO <sub>2</sub> Thin Films for Efficient Flexible Perovskite Photovoltaics. ACS Energy Letters, 2018, 3, 1482-1491.	17.4	75
506	Nitrogen effect on spin-coated ZnO-based p–n homojunctions: structural, optical and electrical characteristics. Journal of Materials Science: Materials in Electronics, 2018, 29, 12690-12699.	2.2	2
507	Roomâ€Temperature Solutionâ€Synthesized pâ€Type Copper(I) lodide Semiconductors for Transparent Thinâ€Film Transistors and Complementary Electronics. Advanced Materials, 2018, 30, e1802379.	21.0	125
508	Solution-processed high-mobility ZnO thin film transistors based on multiple-stacked channel layer doped with Hf and Mg. Superlattices and Microstructures, 2018, 120, 395-401.	3.1	7
509	Printed Electronics Based on Inorganic Semiconductors: From Processes and Materials to Devices. Advanced Materials, 2018, 30, e1707600.	21.0	148
510	Wet-Chemical Synthesis of ZnO Nanowires on Low-Temperature Photo-Activated ZnO-rGO Composite Thin Film with Enhanced Photoconduction. Journal of Electronic Materials, 2018, 47, 5863-5869.	2.2	11
511	Growth and characterization of $\hat{l}^2$ -Ga2O3 thin films by sol-gel method for fast-response solar-blind ultraviolet photodetectors. Journal of Alloys and Compounds, 2018, 766, 601-608.	5.5	88
512	Ultra-high-image-density large-size organic light-emitting devices based on In-Ga-Zn-O thin-film transistors with a coplanar structure. Optics Express, 2018, 26, 16805.	3.4	8
513	Thin film transistor performance of amorphous indium–zinc oxide semiconductor thin film prepared by ultraviolet photoassisted sol–gel processing. Japanese Journal of Applied Physics, 2018, 57, 05GD01.	1.5	5
514	A study on the persistent photoconductance and transient photo-response characteristics of photochemically activated and thermally annealed indiumâ€'galliumâ€'zinc-oxide thin-film transistors. Thin Solid Films, 2018, 660, 749-753.	1.8	10
515	Nanostructured Graphene: An Active Component in Optoelectronic Devices. Nanomaterials, 2018, 8, 328.	4.1	8
516	Sol-Gel Preparation of Crystalline Oxide Thin Films on Plastics. , 2018, , 3271-3294.		2
517	Transparent Thin-Film Transistors Based on c-Axis Oriented, Vertically Aligned ZnO Nanorod Arrays via Solution Processing. Journal of Electronic Materials, 2018, 47, 6091-6100.	2.2	0

#	Article	IF	CITATIONS
518	A Multifunctional Interlayer for Solution Processed High Performance Indium Oxide Transistors. Scientific Reports, 2018, 8, 10946.	3.3	23
519	Fully solution processed Al-TiO2-Si (MIS) structured photo-detector. AIP Conference Proceedings, 2018, , .	0.4	2
520	A Solution-Processed Operational Amplifier Using Direct Light-Patterned a-InGaZnO TFTs. IEEE Transactions on Electron Devices, 2018, 65, 1796-1802.	3.0	10
521	Electronic Devices Based on Oxide Thin Films Fabricated by Fiber-to-Film Process. ACS Applied Materials & Lamp; Interfaces, 2018, 10, 18057-18065.	8.0	14
522	Effective Atmospheric-Pressure Plasma Treatment toward High-Performance Solution-Processed Oxide Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2018, 10, 30581-30586.	8.0	40
523	Solution-Processed Rb-Doped Indium Zinc Oxide Thin-Film Transistors. IEEE Electron Device Letters, 2018, 39, 1330-1333.	3.9	6
524	Solution-processed gallium-tin-oxide as a new choice for indium-free active layers in TFTs. , 2018, , .		0
525	Corrugated Heterojunction Metalâ€Oxide Thinâ€Film Transistors with High Electron Mobility via Vertical Interface Manipulation. Advanced Materials, 2018, 30, e1804120.	21.0	71
526	Solutionâ€Based Micro―and Nanoscale Metal Oxide Structures Formed by Direct Patterning for Electroâ€Optical Applications. Advanced Materials, 2018, 30, e1800923.	21.0	32
527	P-128: Ultralow Temperature Solution-processed Al2 O3 Gate Dielectrics using Photochemically Activated Nanocluster Precursors. Digest of Technical Papers SID International Symposium, 2018, 49, 1581-1583.	0.3	0
528	Piezotronic graphene barristor: Efficient and interactive modulation of Schottky barrier. Nano Energy, 2018, 50, 598-605.	16.0	31
529	Low temperature solution-processed IGZO thin-film transistors. Applied Surface Science, 2018, 455, 554-560.	6.1	56
530	Investigation of the evolution of nitrogen defects in flash-lamp-annealed InGaZnO films and their effects on transistor characteristics. Applied Physics Express, 2018, 11, 061104.	2.4	10
531	High-Performance All-Printed Amorphous Oxide FETs and Logics with Electronically Compatible Electrode/Channel Interface. ACS Applied Materials & Samp; Interfaces, 2018, 10, 22408-22418.	8.0	39
532	Solution Processed Metal Oxide Highâ€P Dielectrics for Emerging Transistors and Circuits. Advanced Materials, 2018, 30, e1706364.	21.0	158
533	High-Performance Thin-Film Transistors with Aqueous Solution-Processed NilnO Channel Layer. ACS Applied Electronic Materials, 2019, 1, 1842-1851.	4.3	21
534	Roomâ€Temperature Fabrication of Highâ€Quality Lanthanum Oxide Highâ€P  Dielectric Films by a Solution Process for Lowâ€Power Soft Electronics. Advanced Electronic Materials, 2019, 5, 1900427.	5.1	9
535	A Siteâ€Specific Charge Carrier Control in Monolithic Integrated Amorphous Oxide Semiconductors and Circuits with Locally Induced Opticalâ€Doping Process. Advanced Functional Materials, 2019, 29, 1904770.	14.9	11

#	Article	IF	CITATIONS
536	Impact of Layer Configuration and Doping on Electron Transport and Bias Stability in Heterojunction and Superlattice Metal Oxide Transistors. Advanced Functional Materials, 2019, 29, 1902591.	14.9	46
537	Nanowires assembled from iron manganite nanoparticles: Synthesis, characterization, and investigation of electrocatalytic properties for water oxidation reaction. Journal of Materials Research, 2019, 34, 3231-3239.	2.6	7
538	Role of monoethanolamine concentration for physical properties of Cu2CoSnS4 nanoparticles via one-pot hydrothermal synthesis: Toward low temperature, high performance nanocrystalline CCTS photodetectors by hybrid UV-vacuum annealing. Materials Letters, 2019, 254, 9-12.	2.6	11
539	Marked Cofuel Tuning of Combustion Synthesis Pathways for Metal Oxide Semiconductor Films. Advanced Electronic Materials, 2019, 5, 1900540.	5.1	13
540	Improved electrical properties of laser annealed In and Ga co-doped ZnO thin films for transparent conducting oxide applications. Ceramics International, 2019, 45, 23934-23940.	4.8	18
541	Low-temperature solution-processed flexible metal oxide thin-film transistors via laser annealing. Journal Physics D: Applied Physics, 2019, 52, 385105.	2.8	19
542	Photochemical low-temperature synthesis of iron(III) oxide thin films. Applied Surface Science, 2019, 493, 525-532.	6.1	8
543	All-Inkjet-Printed Vertical Heterostructure for Wafer-Scale Electronics. ACS Nano, 2019, 13, 8213-8221.	14.6	12
544	SiO2 and TiO2 Sol-Gel Blends with Tunable Optical and Electronic Properties. MRS Advances, 2019, 4, 689-695.	0.9	0
545	Artificially Fabricated Subgap States for Visible-Light Absorption in Indium–Gallium–Zinc Oxide Phototransistor with Solution-Processed Oxide Absorption Layer. ACS Applied Materials & amp; Interfaces, 2019, 11, 38964-38972.	8.0	32
546	Ultrahigh-Mobility and Solution-Processed Inorganic P-Channel Thin-Film Transistors Based on a Transition-Metal Halide Semiconductor. ACS Applied Materials & Interfaces, 2019, 11, 40243-40251.	8.0	34
547	Photopatterning and Electrochemical Energy Storage Properties of an On-Chip Organic Radical Microbattery. Langmuir, 2019, 35, 16079-16086.	3.5	12
548	All-room-temperature processed high flexibility resistive switching memory by ultraviolet-radioactive induction. Materials Research Express, 2019, 6, 115923.	1.6	4
549	Environmentâ€Adaptable Artificial Visual Perception Behaviors Using a Lightâ€Adjustable Optoelectronic Neuromorphic Device Array. Advanced Materials, 2019, 31, e1906433.	21.0	207
550	An Acetone Sensor Based on Plasma-Assisted Cataluminescence and Mechanism Studies by Online Ionizations. Analytical Chemistry, 2019, 91, 15763-15768.	6.5	41
551	Morphological transformation of calcium phenylphosphonate microspheres induced by micellization of $\hat{l}^3$ -polyglutamic acid. Journal of Colloid and Interface Science, 2019, 556, 33-46.	9.4	2
552	Photo-annealed amorphous titanium oxide for perovskite solar cells. Nanoscale, 2019, 11, 19488-19496.	5.6	12
553	Solution-Processed DyO <sub><i>x</i></sub> for Aging Diffusion ZnSnO Transistors and Applications in Low-Voltage-Operating Logic Circuits. IEEE Transactions on Electron Devices, 2019, 66, 3479-3484.	3.0	10

#	Article	IF	CITATIONS
554	The Indium-Gallium-Tin-Oxide thin film transistor with better performance based on the solution procession. , 2019, , .		2
555	Solution processed boron doped indium oxide thin-film as channel layer in thin-film transistors. Journal of Materials Science: Materials in Electronics, 2019, 30, 18696-18701.	2.2	8
556	Fabrication characterization of hafnium oxide thin films. Materials Today: Proceedings, 2019, 17, 1555-1560.	1.8	6
557	Facile organic surfactant removal of various dimensionality nanomaterials using low-temperature photochemical treatment. RSC Advances, 2019, 9, 730-737.	3.6	4
558	Ultrathin, Wrinkled, Vertically Aligned Co(OH) <sub>2</sub> Nanosheets/Ag Nanowires Hybrid Network for Flexible Transparent Supercapacitor with High Performance. ACS Applied Materials & Samp; Interfaces, 2019, 11, 8992-9001.	8.0	100
559	Enhanced Stability of Sr-Doped Aqueous In <sub>2</sub> O <sub>3</sub> Thin-Film Transistors Under Bias/Illumination/Thermal Stress. IEEE Transactions on Electron Devices, 2019, 66, 1308-1313.	3.0	13
560	Electrical Stability of Solution-Processed a-IGZO TFTs Exposed to High-Humidity Ambient for Long Periods. IEEE Journal of the Electron Devices Society, 2019, 7, 26-32.	2.1	18
561	Sol–Gel Processed p-Type CuAlO <sub>2</sub> Semiconductor Thin Films and the Integration in Transistors. IEEE Transactions on Electron Devices, 2019, 66, 1458-1463.	3.0	26
562	High Performance of aâ€IZTO TFT by Purification of the Semiconductor Oxide Precursor. Advanced Materials Interfaces, 2019, 6, 1900277.	3.7	37
563	Effects of helium annealing in low-temperature and solution-processed amorphous indium-gallium-zinc-oxide thin-film transistors. AIP Advances, 2019, 9, .	1.3	1
564	Flexible CuO nanotube arrays composite electrodes for wire-shaped supercapacitors with robust electrochemical stability. Chemical Engineering Journal, 2019, 374, 181-188.	12.7	47
565	Direct-writing Structure Color Patterns on the Electrospun Colloidal Fibers toward Wearable Materials. Chinese Journal of Polymer Science (English Edition), 2019, 37, 729-736.	3.8	10
566	High-Speed and Low-Temperature Atmospheric Photo-Annealing of Large-Area Solution-Processed IGZO Thin-Film Transistors by Using Programmable Pulsed Operation of Xenon Flash Lamp. Journal of the Korean Physical Society, 2019, 74, 1052-1058.	0.7	6
567	Transparent and flexible photonic artificial synapse with piezo-phototronic modulator: Versatile memory capability and higher order learning algorithm. Nano Energy, 2019, 63, 103843.	16.0	64
568	Polymer-Doped Ink System for Threshold Voltage Modulation in Printed Metal Oxide Thin Film Transistors. Journal of Physical Chemistry Letters, 2019, 10, 3415-3419.	4.6	7
569	Protein Biophotosensitizer-Based IGZO Photo-thin Film Transistors for Monitoring Harmful Ultraviolet Light. ACS Applied Bio Materials, 2019, 2, 3030-3037.	4.6	7
570	All inorganic solution processed three terminal charge trapping memory device. Applied Physics Letters, 2019, 114, .	3.3	52
571	Lowâ€Temperature Processing of Printed Fieldâ€Effect Transistors from Sublimatingâ€Stabilizer Derived Oxide Nanodispersions. Advanced Electronic Materials, 2019, 5, 1800764.	5.1	2

#	Article	IF	CITATIONS
572	Wearable 1 V operating thin-film transistors with solution-processed metal-oxide semiconductor and dielectric films fabricated by deep ultra-violet photo annealing at low temperature. Scientific Reports, 2019, 9, 8416.	3.3	31
573	Fieldâ€Driven Athermal Activation of Amorphous Metal Oxide Semiconductors for Flexible Programmable Logic Circuits and Neuromorphic Electronics. Small, 2019, 15, e1901457.	10.0	11
574	The Effect of Ion-Beam Bombardment on Solution-Processed Nickel Oxide Films Used for Liquid Crystal Alignment. ECS Journal of Solid State Science and Technology, 2019, 8, R66-R69.	1.8	0
575	A low-temperature and short-annealing process for metal oxide thin film transistors using deep ultraviolet light for roll-to-roll processing. Current Applied Physics, 2019, 19, 954-960.	2.4	6
576	Low-voltage high-performance flexible digital and analog circuits based on ultrahigh-purity semiconducting carbon nanotubes. Nature Communications, 2019, 10, 2161.	12.8	141
577	Vacuum Ultraviolet Photochemical Sol-Gel Processing of Zn, Sn, Zn-Sn Oxide Thin Films for Encapsulation of Organic Light Emitting Diodes. Journal of the Electrochemical Society, 2019, 166, B3176-B3183.	2.9	13
578	Field Effect Transistors Based on One-Dimensional, Metal-Oxide Semiconducting Nanofiber Mats. Journal of the Korean Physical Society, 2019, 74, 827-830.	0.7	5
579	Expeditious, scalable solution growth of metal oxide films by combustion blade coating for flexible electronics. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9230-9238.	7.1	35
580	High-performance metal-oxide thin-film transistors based on inkjet-printed self-confined bilayer heterojunction channels. Journal of Materials Chemistry C, 2019, 7, 6169-6177.	5.5	31
581	Printed flexible and transparent electronics: enhancing low-temperature processed metal oxides with OD and 1D nanomaterials. Nanotechnology, 2019, 30, 272001.	2.6	22
582	Printed Diodes: Materials Processing, Fabrication, and Applications. Advanced Science, 2019, 6, 1801653.	11.2	71
583	Revisit of amorphous semiconductor InGaZnO4: A new electron transport material for perovskite solar cells. Journal of Alloys and Compounds, 2019, 789, 276-281.	5.5	16
584	Recent Progress in Inkjetâ€Printed Thinâ€Film Transistors. Advanced Science, 2019, 6, 1801445.	11.2	187
585	Processing, Structure, and Transistor Performance: Combustion versus Pulsed Laser Growth of Amorphous Oxides. ACS Applied Electronic Materials, 2019, 1, 548-557.	4.3	15
586	Low-Voltage-Operating Transistors and Logic Circuits Based on a Water-Driven ZrGdO <sub><i>x</i>&gt; Dielectric with Low-Cost ZnSnO. ACS Applied Electronic Materials, 2019, 1, 625-636.</sub>	4.3	15
587	Intense Pulsed Light Annealing Process of Indium–Gallium–Zinc–Oxide Semiconductors via Flash White Light Combined with Deep-UV and Near-Infrared Drying for High-Performance Thin-Film Transistors. ACS Applied Materials & Interfaces, 2019, 11, 13380-13388.	8.0	30
588	High-Mobility Inkjet-Printed Indium-Gallium-Zinc-Oxide Thin-Film Transistors Using Sr-Doped Al2O3 Gate Dielectric. Materials, 2019, 12, 852.	2.9	11
589	Inkjetâ€Printed and Deepâ€UVâ€Annealed YAlO <i><sub>x</sub></i> Dielectrics for Highâ€Performance IGZO Thinâ€Film Transistors on Flexible Substrates. Advanced Electronic Materials, 2019, 5, 1800843.	5.1	25

#	Article	IF	CITATIONS
590	Significant Performance Improvement of Solution-Processed Metal Oxide Transistors by Ligand Dissociation through Coupled Temperature–Time Treatment of Aqueous Precursors. ACS Applied Electronic Materials, 2019, 1, 505-512.	4.3	24
591	Corrosion behavior of a sol-gel ZrO2 pore-sealing film prepared on a micro-arc oxidized aluminum alloy. Ceramics International, 2019, 45, 11062-11067.	4.8	18
592	Solution-processed metal-oxide thin-film transistors: a review of recent developments. Nanotechnology, 2019, 30, 312001.	2.6	78
593	Solution-Processed Hybrid Ambipolar Thin-Film Transistors Fabricated at Low Temperature. Electronic Materials Letters, 2019, 15, 402-408.	2.2	4
594	High-performance low voltage operation of indium zinc tin oxide thin film transistors using chemically derived sodium $\hat{l}^2$ -alumina dielectric. Journal of Materials Science: Materials in Electronics, 2019, 30, 9097-9105.	2.2	11
595	Toward Robust Photoelectrochemical Operation of Cuprous Oxide Nanowire Photocathodes Using a Strategically Designed Solution-Processed Titanium Oxide Passivation Coating. ACS Applied Materials & Amp; Interfaces, 2019, 11, 14840-14847.	8.0	10
596	Solutionâ€Free UVâ€Based Direct Surface Modification of Oxide Films for Selfâ€Patterned Metalâ€Oxide Thinâ€Film Transistors. Advanced Electronic Materials, 2019, 5, 1900073.	5.1	8
597	Investigation on the electrical performances and stability of W-doped ZnO thin-film transistors. Materials Science in Semiconductor Processing, 2019, 95, 54-58.	4.0	13
598	Thin-Film Oxide Transistor by Liquid Process (2): UV and Solvothermal Treatments for TFT Fabrication. , 2019, , 441-505.		0
599	Low-Temperature Aqueous Route Processed Indium Oxide Thin-Film Transistors by NH <sub>3</sub> Plasma-Assisted Treatment. IEEE Transactions on Electron Devices, 2019, 66, 1302-1307.	3.0	14
600	Fabrication of Superior Singleâ€Atom Catalysts toward Diverse Electrochemical Reactions. Small Methods, 2019, 3, 1800497.	8.6	99
601	The Performance of Zr-Doped Al-Zn-Sn-O Thin Film Transistor Prepared by Co-Sputtering. Applied Sciences (Switzerland), 2019, 9, 5150.	2.5	4
602	A visible light detector based on a heterojunction phototransistor with a highly stable inorganic CsPbl <sub>x</sub> Br <sub>3â^'x</sub> perovskite and Inâ€"Gaâ€"Znâ€"O semiconductor double-layer. Journal of Materials Chemistry C, 2019, 7, 14223-14231.	5.5	37
603	Unique chemistries of metal-nitrate precursors to form metal-oxide thin films from solution: materials for electronic and energy applications. Journal of Materials Chemistry A, 2019, 7, 24124-24149.	10.3	78
604	Pulsed laser deposition of amorphous InGaZnO <sub>4</sub> as an electron transport layer for perovskite solar cells. Journal of Advanced Dielectrics, 2019, 09, 1950042.	2.4	4
605	Monolithic integration of high-voltage thin-film electronics on low-voltage integrated circuits using a solution process. Nature Electronics, 2019, 2, 540-548.	26.0	56
606	A skin-like two-dimensionally pixelized full-color quantum dot photodetector. Science Advances, 2019, 5, eaax8801.	10.3	95
607	Suppression of Interfacial Disorders in Solution-Processed Metal Oxide Thin-Film Transistors by Mg Doping. ACS Applied Materials & Samp; Interfaces, 2019, 11, 48054-48061.	8.0	11

#	Article	IF	CITATIONS
608	Direct Electrohydrodynamic Patterning of High-Performance All Metal Oxide Thin-Film Electronics. ACS Nano, 2019, 13, 13957-13964.	14.6	34
609	Formation of submicron-sized silica patterns on flexible polymer substrates based on vacuum ultraviolet photo-oxidation. RSC Advances, 2019, 9, 32313-32322.	3.6	8
610	Plasma assisted vapor solid deposition of Co <sub>3</sub> O <sub>4</sub> tapered nanorods for energy applications. Journal of Materials Chemistry A, 2019, 7, 26302-26310.	10.3	5
611	Facile micro-patterning of ferromagnetic CoFe2O4 films using a combined approach of sol–gel method and UV irradiation. Ceramics International, 2019, 45, 369-377.	4.8	8
612	Chemical and structural analysis of low-temperature excimer-laser annealing in indium-tin oxide sol-gel films. Current Applied Physics, 2019, 19, 168-173.	2.4	23
613	Solution-processed inorganic p-channel transistors: Recent advances and perspectives. Materials Science and Engineering Reports, 2019, 135, 85-100.	31.8	74
614	Direct-printed nanoscale metal-oxide-wire electronics. Nano Energy, 2019, 58, 437-446.	16.0	36
615	Solution-Grown Homojunction Oxide Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2019, 11, 4103-4110.	8.0	18
616	Fabrication of a p-type Cu2O thin-film via UV-irradiation of a patternable molecular-precursor film containing Cu(II) complexes. Journal of Crystal Growth, 2019, 509, 112-117.	1.5	12
617	A Simple, Low Cost Ink System for Drop-on-Demand Printing High Performance Metal Oxide Dielectric Film at Low Temperature. ACS Applied Materials & Samp; Interfaces, 2019, 11, 5193-5199.	8.0	16
618	Recent progress on jet printing of oxide-based thin film transistors. Journal Physics D: Applied Physics, 2019, 52, 143002.	2.8	40
619	Solution processing of alternating PDMS/SiOx multilayer for encapsulation of organic light emitting diodes. Organic Electronics, 2019, 64, 176-180.	2.6	23
620	Proton Conductor Gated Synaptic Transistor Based on Transparent IGZO for Realizing Electrical and UV Light Stimulus. IEEE Journal of the Electron Devices Society, 2019, 7, 38-45.	2.1	24
621	Solution-Processed Physically Transient Resistive Memory Based on Magnesium Oxide. IEEE Electron Device Letters, 2019, 40, 193-195.	3.9	23
622	Exploiting In Situ Redox and Diffusion of Molybdenum to Enable Thinâ€Film Circuitry for Low ost Wireless Energy Harvesting. Advanced Functional Materials, 2019, 29, 1806002.	14.9	7
623	Polymer Doping Enables a Twoâ€Dimensional Electron Gas for Highâ€Performance Homojunction Oxide Thinâ€Film Transistors. Advanced Materials, 2019, 31, e1805082.	21.0	43
624	A Review of Lowâ€Temperature Solutionâ€Processed Metal Oxide Thinâ€Film Transistors for Flexible Electronics. Advanced Functional Materials, 2020, 30, 1904632.	14.9	265
625	Amorphous hybrid TiO2 thin films: The role of organic ligands and UV irradiation. Applied Surface Science, 2020, 502, 144095.	6.1	14

#	ARTICLE	IF	CITATIONS
626	Synaptic functions and a memristive mechanism on Pt/AlO <sub> <i>x</i> </sub> /HfO <sub> <i>x</i> </sub> /TiN bilayer-structure memristors. Journal Physics D: Applied Physics, 2020, 53, 035302.	2.8	20
627	Deep-ultraviolet sensing characteristics of transparent and flexible IGZO thin film transistors. Journal of Alloys and Compounds, 2020, 817, 152788.	5.5	37
628	Electro-optical performance of liquid crystal device based on Al-doped SnO fabricated by sol-gel process. Liquid Crystals, 2020, 47, 345-351.	2,2	4
629	Printable Semiconductors for Backplane TFTs of Flexible OLED Displays. Advanced Functional Materials, 2020, 30, 1904588.	14.9	136
630	The Effect of Heating Temperature in Ultraviolet Irradiation Process on Properties of YBa2Cu3O7- x Superconducting Films Processed From Photosensitive Solution. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	1
631	Properties of UV-irradiated TiO2, ZrO2, and TiO2-ZrO2 films as pore-sealing layers on micro-arc-oxidized aluminum alloys. Journal of Sol-Gel Science and Technology, 2020, 93, 70-78.	2.4	9
632	Enhancing responsivity and detectivity in broadband UV–VIS photodetector by ex-situ UV–ozone annealing technique. Superlattices and Microstructures, 2020, 137, 106333.	3.1	15
633	Recent Progress in Photonic Processing of Metalâ€Oxide Transistors. Advanced Functional Materials, 2020, 30, 1906022.	14.9	58
634	Impact of NH3 plasma treatment for solution-processed indium oxide thin-film transistors with low thermal budget. Journal of Alloys and Compounds, 2020, 817, 152720.	5.5	7
635	Colloidal metal oxides in electronics and optoelectronics. , 2020, , 203-246.		3
636	Rapid photo-assisted activation and enhancement of solution-processed InZnO thin-film transistors. Journal Physics D: Applied Physics, 2020, 53, 045102.	2.8	5
637	Influence of Post-UV/Ozone Treatment of Ultrasonic-Sprayed Zirconium Oxide Dielectric Films for a Low-Temperature Oxide Thin Film Transistor. Materials, 2020, 13, 6.	2.9	11
638	Self-Powered Au/MgZnO/Nanolayered Ga-Doped ZnO/In Metal–Insulator–Semiconductor UV Detector with High Internal Gain at Deep UV Light under Low Voltage. ACS Applied Nano Materials, 2020, 3, 120-130.	5.0	20
639	High stress-driven voltages in net-like layer-supported organic–inorganic perovskites. Journal of Materials Chemistry C, 2020, 8, 2643-2658.	5.5	14
640	An Ultraâ€Flexible Solutionâ€Processed Metalâ€Oxide/Carbon Nanotube Complementary Circuit Amplifier with Highly Reliable Electrical and Mechanical Stability. Advanced Electronic Materials, 2020, 6, 1900845.	5.1	11
641	Towards flexible CMOS circuits. Nature Nanotechnology, 2020, 15, 11-12.	31.5	16
642	ZnO bilayer thin film transistors using H2O and O3 as oxidants by atomic layer deposition. Acta Materialia, 2020, 185, 204-210.	7.9	28
643	Hybrid Passivation for Foldable Indium Gallium Zinc Oxide Thinâ€Film Transistors Mediated by Lowâ€Temperature and Lowâ€Damage Paryleneâ€C/Atomic Layer Depositionâ€AlO <sub><i>x</i></sub> Coating. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900832.	1.8	8

#	Article	IF	CITATIONS
644	Room-temperature fabricated artificial synapse modulated by ultrathin SiO buffer layer. Materials Letters, 2020, 261, 127093.	2.6	3
645	Recent Progress in Photonic Synapses for Neuromorphic Systems. Advanced Intelligent Systems, 2020, 2, 1900136.	6.1	132
646	The Impact of Solvents on the Performances of Solutionâ€Processed Indium Gallium Zinc Oxide Thinâ€Film Transistors Using Nitrate Ligands. Advanced Engineering Materials, 2020, 22, 1901053.	3.5	8
647	Recycling of Spent Indium–Gallium–Zinc Oxide Based on Molten Salt Electrolysis. ACS Sustainable Chemistry and Engineering, 2020, 8, 16296-16303.	6.7	14
648	Low-Temperature Solution Approaches for the Potential Integration of Ferroelectric Oxide Films in Flexible Electronics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1967-1979.	3.0	14
649	Functional Metal Oxide Ink Systems for Drop-on-Demand Printed Thin-Film Transistors. Langmuir, 2020, 36, 8655-8667.	3.5	14
650	Microstructural modulation of organic passivation layers for metal oxide semiconductors to achieve high bias stability. Journal of Materials Chemistry C, 2020, 8, 11209-11222.	5.5	6
651	Controllable surface contact resistance in solution-processed thin-film transistors due to dimension modification. Semiconductor Science and Technology, 2020, 35, 10LT02.	2.0	47
652	Optical-field driven charge-transfer modulations near composite nanostructures. Nature Communications, 2020, 11, 6150.	12.8	2
653	38â€1: Invited Paper: Highâ€Performance Metalâ€Oxide Semiconductor based Optoelectronics. Digest of Technical Papers SID International Symposium, 2020, 51, 536-539.	0.3	0
654	Toward ultraviolet solution processed ZrOx/IZO transistors with top-gate and dual-gate operation: Selection of solvents, precursors, stabilizers, and additive elements. Journal of Alloys and Compounds, 2020, 847, 156431.	5.5	12
655	Inkâ€Based Additive Nanomanufacturing of Functional Materials for Humanâ€Integrated Smart Wearables. Advanced Intelligent Systems, 2020, 2, 2000117.	6.1	17
656	Zero-Dimensional PbS Quantum Dot–InGaZnO Film Heterostructure for Short-Wave Infrared Flat-Panel Imager. ACS Photonics, 2020, 7, 1932-1941.	6.6	26
657	A flexible ECG patch compatible with NFC RF communication. Npj Flexible Electronics, 2020, 4, .	10.7	62
658	Experimental and theoretical evidence for hydrogen doping in polymer solution-processed indium gallium oxide. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18231-18239.	7.1	31
659	Novel plasma-assisted combustion route for NiOx thin film deposition. Journal of Materials Science: Materials in Electronics, 2020, 31, 19836-19845.	2.2	4
660	Flexible low-power source-gated transistors with solution-processed metal–oxide semiconductors. Nanoscale, 2020, 12, 21610-21616.	5.6	23
661	Uniform High-k Amorphous Native Oxide Synthesized by Oxygen Plasma for Top-Gated Transistors. Nano Letters, 2020, 20, 7469-7475.	9.1	37

#	Article	IF	CITATIONS
662	Highly Scalable and Robust Mesaâ€Islandâ€Structure Metalâ€Oxide Thinâ€Film Transistors and Integrated Circuits Enabled by Stressâ€Diffusive Manipulation. Advanced Materials, 2020, 32, e2003276.	21.0	11
663	Recent advances in green synthesis and modification of inorganic nanomaterials by ionizing and non-ionizing radiation. Journal of Materials Chemistry A, 2020, 8, 23029-23058.	10.3	17
664	Enhancing the Performance of Solution-Processed Thin-Film Transistors via Laser Scanning Annealing. ACS Applied Electronic Materials, 2020, 2, 2970-2975.	4.3	10
665	In-Plane Amorphous Oxide Ionotronic Devices and Circuits with Photochemically Enabled Favorable Interfaces. ACS Applied Materials & Samp; Interfaces, 2020, 12, 44288-44296.	8.0	3
666	Trends in Lowâ€Temperature Combustion Derived Thin Films for Solutionâ€Processed Electronics. Advanced Electronic Materials, 2020, 6, 2000464.	5.1	22
667	Room-temperature ultraviolet-ozone annealing of ZnO and ZnMgO nanorods to attain enhanced optical properties. Journal of Materials Science: Materials in Electronics, 2020, 31, 18777-18790.	2.2	4
668	Deep-UV-Enhanced Approach for Low-Temperature Solution Processing of IZO Transistors with High-k AlOx/YAlOx Dielectric. ACS Applied Electronic Materials, 2020, 2, 3141-3151.	4.3	13
669	Coating Thickness Controls Crystallinity and Enables Homoepitaxial Growth of Ultraâ€Thinâ€Channel Bladeâ€Coated In <sub>2</sub> O <sub>3</sub> Transistors. Advanced Electronic Materials, 2020, 6, 2000354.	5.1	7
670	High-Intensity Ultrasound-Assisted Low-Temperature Formulation of Lanthanum Zirconium Oxide Nanodispersion for Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2020, 12, 44926-44933.	8.0	7
671	Enhanced Electro-Optical Performance of Inorganic Perovskite/a-InGaZnO Phototransistors Enabled by Sn–Pb Binary Incorporation with a Selective Photonic Deactivation. ACS Applied Materials & Samp; Interfaces, 2020, 12, 58038-58048.	8.0	9
672	Highly-Sensitive Textile Pressure Sensors Enabled by Suspended-Type All Carbon Nanotube Fiber Transistor Architecture. Micromachines, 2020, 11, 1103.	2.9	9
673	Enhanced Interfacial Integrity of Amorphous Oxide Thin-Film Transistors by Elemental Diffusion of Ternary Oxide Semiconductors. ACS Applied Materials & Interfaces, 2020, 12, 57996-58004.	8.0	11
674	Substrates in the Synthesis of Two-Dimensional Materials via Chemical Vapor Deposition. Chemistry of Materials, 2020, 32, 10321-10347.	6.7	72
675	Observation of H-lon Migration in a Low-Temperature-Processed Boehmite Layer for Nonvolatile Memory. ACS Applied Electronic Materials, 2020, 2, 3711-3716.	4.3	2
676	Universal direct patterning of colloidal quantum dots by (extreme) ultraviolet and electron beam lithography. Nanoscale, 2020, 12, 11306-11316.	<b>5.</b> 6	27
677	Fabrication Techniques for Curved Electronics on Arbitrary Surfaces. Advanced Materials Technologies, 2020, 5, 2000093.	5.8	47
678	Adsorption of Polarized Molecules for Interfacial Band Engineering of Doped TiO <sub>2</sub> Thin Films. Langmuir, 2020, 36, 5839-5846.	3 <b>.</b> 5	3
679	Lowâ€Voltage Heterojunction Metal Oxide Transistors via Rapid Photonic Processing. Advanced Electronic Materials, 2020, 6, 2000028.	5.1	25

#	Article	IF	CITATIONS
680	Photonic curing of solution-deposited ZrO2 dielectric on PEN: a path towards high-throughput processing of oxide electronics. Npj Flexible Electronics, 2020, 4, .	10.7	25
681	Flexible Electronic Systems on Plastic Substrates and Textiles for Smart Wearable Technologies. Advanced Materials Technologies, 2020, 5, 2000071.	5.8	72
682	Solution-processed amorphous yttrium aluminium oxide YAl <sub>x</sub> O <sub>y</sub> and aluminum oxide Al <sub>x</sub> O <sub>y</sub> , and their functional dielectric properties and performance in thin-film transistors. Journal of Materials Chemistry C, 2020, 8, 8521-8530.	5.5	17
683	Flexible and stretchable metalÂoxide nanofiber networks for multimodal and monolithically integrated wearable electronics. Nature Communications, 2020, 11, 2405.	12.8	174
684	Photoactivated high-k lanthanum oxide-aluminum oxide (La2O3–Al2O3) alloy-type gate dielectrics for low-voltage-operating flexible transistors. Journal of Alloys and Compounds, 2020, 842, 155671.	5.5	8
685	Role of the electronically-active amorphous state in low-temperature processed In <sub>2</sub> O <sub>3</sub> thin-film transistors. Materials Advances, 2020, 1, 167-176.	5.4	12
686	Ultrasensitive and robust two-dimensional indium selenide flexible electronics and sensors for human motion detection. Nano Energy, 2020, 76, 105020.	16.0	28
687	Impact of fluorine doping on solution-processed In–Ga–Zn–O thin-film transistors using an efficient aqueous route. AIP Advances, 2020, 10, .	1.3	9
688	Improvement in Bias Stability of IGZO TFT With Etching Stop Structure by UV Irradiation Treatment of Active Layer Island. IEEE Journal of the Electron Devices Society, 2020, 8, 524-529.	2.1	7
689	Room temperature direct patterning of nanocrystalline zinc oxide on flexible polymer substrates through vacuum ultraviolet light irradiation. Thin Solid Films, 2020, 709, 138166.	1.8	8
690	Magnetic property modulation of Ni thin films transferred onto flexible substrates. Journal of Magnetism and Magnetic Materials, 2020, 511, 166968.	2.3	5
691	Highly Efficient Photo-Induced Charge Separation Enabled by Metal–Chalcogenide Interfaces in Quantum-Dot/Metal-Oxide Hybrid Phototransistors. ACS Applied Materials & Diterfaces, 2020, 12, 16620-16629.	8.0	21
692	Photochemistry in the Lowâ€Temperature Processing of Metal Oxide Thin Films by Solution Methods. Chemistry - A European Journal, 2020, 26, 9277-9291.	3.3	20
693	Singleâ€Atom Catalytic Materials for Advanced Battery Systems. Advanced Materials, 2020, 32, e1906548.	21.0	156
694	Highly stable, solution-processed quaternary oxide thin film-based resistive switching random access memory devices via global and local stoichiometric manipulation strategy. Nanotechnology, 2020, 31, 245202.	2.6	11
695	Enabling high performance n-type metal oxide semiconductors at low temperatures for thin film transistors. Inorganic Chemistry Frontiers, 2020, 7, 1822-1844.	6.0	40
696	Solution Combustion Synthesis: Towards a Sustainable Approach for Metal Oxides. Chemistry - A European Journal, 2020, 26, 9099-9125.	3.3	115
697	Gas adsorption effects on electrical properties of amorphous In <sub>2</sub> O <sub>3</sub> thin-film transistors under various environments. Japanese Journal of Applied Physics, 2020, 59, SIIG06.	1.5	4

#	Article	IF	CITATIONS
698	Lowâ€Temperature Solution Crystallization of Nanostructured Oxides and Thin Films. Chemistry - A European Journal, 2020, 26, 9157-9179.	3.3	14
699	Chemical Synthesis of Single Atomic Site Catalysts. Chemical Reviews, 2020, 120, 11900-11955.	47.7	806
700	Effect of post-deposition treatment on electrical properties of solution-processed a-IGZO Schottky diodes. AIP Advances, 2020, 10, .	1.3	3
701	Thermal processes. , 2020, , 99-107.		1
702	Oxygen Radical Control via Atmospheric Pressure Plasma Treatment for Highly Stable IGZO Thin-Film Transistors. IEEE Transactions on Electron Devices, 2020, 67, 3135-3140.	3.0	12
703	Enhancement Mode Flexible SnO <sub>2</sub> Thin Film Transistors Via a UV/Ozone-Assisted Sol-Gel Approach. IEEE Access, 2020, 8, 123013-123018.	4.2	10
704	Photoferroelectric Thin Films for Flexible Systems by a Threeâ€inâ€One Solutionâ€Based Approach. Advanced Functional Materials, 2020, 30, 2001897.	14.9	21
705	Organic materials as a passivation layer for metal oxide semiconductors. Journal of Materials Chemistry C, 2020, 8, 14983-14995.	5.5	23
706	Resistive switching characteristics of UV-assisted room-temperature-fabricated top-electrode-free SnO <sub>x</sub> ReRAM. Semiconductor Science and Technology, 2020, 35, 085020.	2.0	2
707	Deepâ€Ultraviolet Photoactivationâ€Assisted Contact Engineering Toward Highâ€Efficiency and Stable Allâ€Inorganic CsPbI <sub>2</sub> Br Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000001.	5.8	29
708	Oxygen incorporated solution-processed high- $\langle i \rangle \hat{l}^e \langle i \rangle$ La $\langle sub \rangle 2 \langle sub \rangle 0 \langle sub \rangle 3 \langle sub \rangle$ dielectrics with large-area uniformity, low leakage and high breakdown field comparable with ALD deposited films. Journal of Materials Chemistry C, 2020, 8, 5163-5173.	5.5	8
709	Megahertz operation of vertical organic transistors for ultra-high resolution active-matrix display. Flexible and Printed Electronics, 2020, 5, 014009.	2.7	10
710	Fabrication of TiO 2 Micropatterns on Flexible Substrates by Vacuumâ€Ultraviolet Photochemical Treatments. Advanced Materials Interfaces, 2020, 7, 1901634.	3.7	7
711	Flexible Metal Oxide Semiconductor Devices Made by Solution Methods. Chemistry - A European Journal, 2020, 26, 9126-9156.	3.3	28
712	Bottomâ€Gate Approach for All Basic Logic Gates Implementation by a Singleâ€Type IGZOâ€Based MOS Transistor with Reduced Footprint. Advanced Science, 2020, 7, 1901224.	11.2	4
713	Simplified sol-gel processing method for amorphous TiOx Memristors. Journal of Electroceramics, 2020, 44, 52-58.	2.0	4
714	High-Mobility Flexible Oxyselenide Thin-Film Transistors Prepared by a Solution-Assisted Method. Journal of the American Chemical Society, 2020, 142, 2726-2731.	13.7	47
715	Solution-processed flexible metal-oxide thin-film transistors operating beyond 20 MHz. Flexible and Printed Electronics, 2020, 5, 015003.	2.7	25

#	ARTICLE	IF	CITATIONS
716	Atomic Vacancy Control and Elemental Substitution in a Monolayer Molybdenum Disulfide for High Performance Optoelectronic Device Arrays. Advanced Functional Materials, 2020, 30, 1908147.	14.9	50
717	Printed, Highly Stable Metal Oxide Thinâ€Film Transistors with Ultraâ€Thin Highâ€P Oxide Dielectric. Advanced Electronic Materials, 2020, 6, 1901071.	5.1	57
718	Dual-source device architecture for self-diagnosis and correction of gate bias-stress instability in flexible transparent ZnO thin-film transistors. Journal of Alloys and Compounds, 2020, 823, 153834.	5.5	9
719	Laser induced ultrafast combustion synthesis of solution-based AlO <sub>x</sub> for thin film transistors. Journal of Materials Chemistry C, 2020, 8, 6176-6184.	5.5	22
720	High performance of solution-processed SnO <sub>2</sub> thin-film transistors by promotion of photo-exposure time-dependent carrier transport during the pre-annealing stage. Semiconductor Science and Technology, 2020, 35, 065019.	2.0	7
721	Dual-gate crystalline oxide-nanowire field-effect transistors utilizing ion-gel gate dielectric. Applied Surface Science, 2020, 515, 145988.	6.1	5
722	In Situ Tracking of Low-Temperature VO2 Crystallization via Photocombustion and Characterization of Phase-Transition Reliability on Large-Area Flexible Substrates. Chemistry of Materials, 2020, 32, 4013-4023.	6.7	9
723	Recent Progress of Quantum Dotâ€Based Photonic Devices and Systems: A Comprehensive Review of Materials, Devices, and Applications. Small Structures, 2021, 2, 2000024.	12.0	55
724	Metforminâ€Templated Nanoporous ZnO and Covalent Organic Framework Heterojunction Photoanode for Photoelectrochemical Water Oxidation. ChemSusChem, 2021, 14, 408-416.	6.8	45
725	Recent progress in the development of backplane thin film transistors for information displays. Journal of Information Display, 2021, 22, 1-11.	4.0	60
726	A solution-processed La–Zr–O dielectric at a low temperature for high-performance In-Ga-O transistors: Engineering a precursor solution. Ceramics International, 2021, 47, 6918-6927.	4.8	6
727	Enhanced contact properties of spray-coated AgNWs source and drain electrodes in oxide thin-film transistors. Current Applied Physics, 2021, 21, 155-160.	2.4	4
728	Recent Progress in Solutionâ€Based Metal Oxide Resistive Switching Devices. Advanced Materials, 2021, 33, e2004328.	21.0	99
729	Combination of ultraviolet exposure and thermal post-treatment to obtain high quality HfO2 thin films. Ceramics International, 2021, 47, 9643-9650.	4.8	4
730	Highly conductive low-temperature combustion-derived transparent indium tin oxide thin film. Materials Advances, 2021, 2, 700-705.	5.4	9
731	Fabrication of high-density In2Ga2ZnO7 sputtering target with uniform microstructure. Materials Science in Semiconductor Processing, 2021, 121, 105342.	4.0	2
732	Nickel oxide thin films grown by chemical deposition techniques: Potential and challenges in nextâ€generation rigid and flexible device applications. InformaÄnÃ-Materiály, 2021, 3, 536-576.	17.3	57
733	Fully-printed flexible n-type tin oxide thin-film transistors and logic circuits. Journal of Materials Chemistry C, 2021, 9, 11662-11668.	5.5	26

#	Article	IF	CITATIONS
734	Rapid and Reliable Formation of Highly Densified Bilayer Oxide Dielectrics on Silicon Substrates via DUV Photoactivation for Low-Voltage Solution-Processed Oxide Thin-Film Transistors. ACS Applied Materials & Diterfaces, 2021, 13, 2820-2828.	8.0	8
735	Finding the cause of degradation of low-temperature oxide thin-film transistors. Journal of the Korean Physical Society, 2021, 78, 284-289.	0.7	1
736	A visible-light phototransistor based on the heterostructure of ZnO and TiO <sub>2</sub> with trap-assisted photocurrent generation. RSC Advances, 2021, 11, 12051-12057.	3.6	15
737	Ultraviolet Light-Densified Oxide-Organic Self-Assembled Dielectrics: Processing Thin-Film Transistors at Room Temperature. ACS Applied Materials & Interfaces, 2021, 13, 3445-3453.	8.0	9
738	Low-Temperature Growth of Ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> Thin Films Assisted by Deep Ultraviolet Light Irradiation. ACS Applied Electronic Materials, 2021, 3, 1244-1251.	4.3	16
739	Study on dielectric properties of PVP and Al2O3 thin films and their implementation in low-temperature solution-processed IGZO-based thin-film transistors. Journal of Materials Science: Materials in Electronics, 2021, 32, 7875-7888.	2.2	5
740	Conductive Polymer-Assisted Metal Oxide Hybrid Semiconductors for High-Performance Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2021, 13, 8552-8562.	8.0	11
741	Implementing Roomâ€Temperature Fabrication of Flexible Amorphous Sn–Si–O TFTs via Defect Control. Advanced Materials Interfaces, 2021, 8, 2002193.	3.7	2
742	One-step photonic curing of screen-printed conductive Ni flake electrodes for use in flexible electronics. Scientific Reports, 2021, 11, 3393.	3.3	10
743	Effects of Oxygen Plasma Power on Electrical Characteristics in Multi-Stacked Indium Zinc Oxide Transistors. Electronic Materials Letters, 2021, 17, 222-228.	2.2	2
744	Plasma-assisted combustion synthesis of <i>p</i> -type transparent Cu incorporated NiO thin filmsâ€"Correlation between deposition chemistry and charge transport characteristics. Journal of Applied Physics, 2021, 129, .	2.5	7
746	Investigation of the Determining Factors for the "Mobility Boost―in Highâ€∢i>k⟨/i>â€Gated Transparent Oxide Semiconductor Thinâ€Film Transistors. Advanced Electronic Materials, 2021, 7, 2001037.	5.1	10
747	Multilevel resistive switching performance of TiO2-based flexible memory prepared by low-temperature sol-gel method with UV irradiation. Current Applied Physics, 2021, 24, 32-38.	2.4	15
748	Correlation Between Surface Functionalization and Optoelectronic Properties in Quantum Dot Phototransistors. IEEE Electron Device Letters, 2021, 42, 553-556.	3.9	3
749	Switching the fracture toughness of single-crystal ZnS using light irradiation. Applied Physics Letters, 2021, 118, .	3.3	8
750	Wide Bandgap Oxide Semiconductors: from Materials Physics to Optoelectronic Devices. Advanced Materials, 2021, 33, e2006230.	21.0	185
751	Artificial Synapses Based on Atomic/Molecular Layer Deposited Bilayer-Structured Memristive Thin Films. , 0, , .		0
752	New Challenges of Printed High-D <sup>o</sup> Oxide Dielectrics. Solid-State Electronics, 2021, 183, 108044.	1.4	10

#	Article	IF	CITATIONS
753	4â€1: <i>Invited Paper:</i> Highly Robust Flexible IGZO TFTs and Integrated Circuits. Digest of Technical Papers SID International Symposium, 2021, 52, 17-20.	0.3	0
754	Skin-Compatible Amorphous Oxide Thin-Film-Transistors with a Stress-Released Elastic Architecture. Applied Sciences (Switzerland), 2021, 11, 5501.	2.5	3
755	Photo-assisted low temperature crystallization of solution-derived LiCoO2 thin film. Materials Research Bulletin, 2021, 138, 111241.	5.2	5
756	Low-Frequency Noise Characteristics of Inkjet-Printed Electrolyte-Gated Thin-Film Transistors. IEEE Electron Device Letters, 2021, 42, 843-846.	3.9	1
757	Effect of UV irradiation on the resistive switching characteristics of low-temperature solution-processed ZrO2 RRAM. Semiconductor Science and Technology, 2021, 36, 085004.	2.0	5
758	UV Photochromism in Transition Metal Oxides and Hybrid Materials. Small, 2021, 17, e2100621.	10.0	51
759	Doping Indium Oxide Films with Aminoâ€Polymers of Varying Nitrogen Content Markedly Affects Charge Transport and Mechanical Flexibility. Advanced Functional Materials, 2021, 31, 2100451.	14.9	10
760	Effects of Oxygen Injection Rates on a-IGZO Thin-film Transistors with Oxygen Plasma Treatment. Journal of Semiconductor Technology and Science, 2021, 21, 189-198.	0.4	2
761	Photonic Curing of Solution-Processed Oxide Semiconductors with Efficient Gate Absorbers and Minimal Substrate Heating for High-Performance Thin-Film Transistors. ACS Omega, 2021, 6, 17323-17334.	3.5	13
762	Influence of metallization process on solution-processed InGaZnO thin film transistors. Nanotechnology, 2021, 32, 405203.	2.6	3
763	Transistores de PelÃcula Delgada Basados en Oxido de Zinc por Spray Pyrolysis UltrasÃ <sup>3</sup> nico de Alta Frecuencia a Baja Temperatura. Revista Mexicana De FÃsica, 2021, 67, .	0.4	1
764	Fully Printed High-Performance n-Type Metal Oxide Thin-Film Transistors Utilizing Coffee-Ring Effect. Nano-Micro Letters, 2021, 13, 164.	27.0	30
765	Role of MoTi diffusion barrier in amorphous indium-gallium-zinc-oxide thin-film transistors with a copper source/drain electrode. Thin Solid Films, 2021, 731, 138759.	1.8	9
766	Low-energy intense pulsed light annealing of $InZnO$ sol-gel films via employment of a resonant absorber. Applied Physics Letters, 2021, $119$ , .	3.3	1
768	Intrinsically Photopolymerizable Dynamic Polymers Derived from a Natural Small Molecule. ACS Applied Materials & Derived Mater	8.0	48
769	Low-Temperature Fabrication of IZO Thin Film for Flexible Transistors. Nanomaterials, $2021,11,2552.$	4.1	6
770	Photo-patterned oxide films produced using polymeric metal acrylate for low-voltage thin-film transistors. Ceramics International, 2021, 47, 26242-26247.	4.8	1
771	Effects of atmosphere composition during direct ultraviolet-light patterning of solution-deposited In2O3 thin film transistors. Thin Solid Films, 2021, 733, 138829.	1.8	0

#	Article	IF	CITATIONS
772	Recent progress of oxide-TFT-based inverter technology. Journal of Information Display, 2021, 22, 211-229.	4.0	24
773	Flashlight-material interaction for wearable and flexible electronics. Materials Today, 2021, 51, 525-551.	14.2	23
774	Multimode Operation of Organic–Inorganic Hybrid Thin-Film Transistors Based on Solution-Processed Indium Oxide Films. ACS Applied Materials & Interfaces, 2021, 13, 43051-43062.	8.0	1
775	Improved dynamic responses of room-temperature operable field-effect-transistor gas sensors enabled by programmable multi-spectral ultraviolet illumination. Sensors and Actuators B: Chemical, 2021, 342, 130058.	7.8	10
776	Largeâ€Area Pixelized Optoelectronic Neuromorphic Devices with Multispectral Lightâ€Modulated Bidirectional Synaptic Circuits. Advanced Materials, 2021, 33, e2105017.	21.0	45
777	Lowâ€Temperature Solutionâ€Processed Transparent QLED Using Inorganic Metal Oxide Carrier Transport Layers. Advanced Functional Materials, 2022, 32, 2106387.	14.9	15
778	Exploiting Thermoplasmonic Effects for Laserâ€Assisted Preparation of Au Nanoparticles/InZnO Thin Film with Visible Range Photodetection Properties. Advanced Optical Materials, 2021, 9, 2100045.	7.3	4
779	Ag mesh network framework based nano composite for transparent conductive functional electrodes for capacitive touch sensor and thin film heater. Ceramics International, 2021, 47, 27230-27240.	4.8	13
780	Hydrothermally obtained type-â; heterojunction nanostructures of In2S3 / TiO2 for remarkably enhanced photoelectrochemical water splitting. Applied Catalysis B: Environmental, 2021, 295, 120276.	20.2	89
781	Fabrication of flexible electrochromic film based on amorphous isopolytungstate by low-temperature inkjet-printed process with a solution crystallization kinetic-controlled strategy. Chemical Engineering Journal, 2022, 427, 131840.	12.7	10
782	Improved High-Performance Solution Processed Inâ,, $O$ â, $f$ Thin Film Transistor Fabricated by Femtosecond Laser Pre-Annealing Process. IEEE Access, 2021, 9, 44453-44462.	4.2	9
783	New strategies toward high-performance and low-temperature processing of solution-based metal oxide TFTs., 2021,, 585-621.		4
784	Unveiling the Role of Al <sub>2</sub> O <sub>3</sub> Interlayer in Indium–Gallium–Zinc–Oxide Transistors. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000621.	1.8	4
785	Ligand Tailoring Oxide Colloidal Quantum Dots for Siliconâ€Integrated Ultraviolet Photodiode. Advanced Electronic Materials, 2020, 6, 1901238.	5.1	7
786	Conducting Materials for Printed Electronics. Springer Briefs in Electrical and Computer Engineering, 2014, , 49-74.	0.5	3
787	Sol-Gel Preparation of Crystalline Oxide Thin Films on Plastics. , 2016, , 1-24.		2
788	Effects of lithium doping and ultraviolet photo-patterning on electrical properties of InGaZnO thin film transistors. Thin Solid Films, 2020, 707, 138098.	1.8	3
789	Improving optical properties and controlling defect-bound states in ZnMgO thin films through ultraviolet–ozone annealing. Thin Solid Films, 2020, 708, 138112.	1.8	7

#	Article	IF	CITATIONS
791	Effect of Ga composition on mobility in a-InGaZnO thin-film transistors. Nanotechnology, 2021, 32, 095201.	2.6	2
792	Atomic layer deposition for quantum dots based devices. Opto-Electronic Advances, 2020, 3, 19004301-19004314.	13.3	29
793	Effects of Intense Pulsed Light (IPL) Rapid Annealing and Back-Channel Passivation on Solution-Processed In-Ga-Zn-O Thin Film Transistors Array. Micromachines, 2020, 11, 508.	2.9	9
794	Recent Advances of Solution-Processed Heterojunction Oxide Thin-Film Transistors. Nanomaterials, 2020, 10, 965.	4.1	19
795	Solution-Processed Metal Oxide Thin Film Nanostructures for Water Splitting Photoelectrodes: A Review. Journal of the Korean Ceramic Society, 2018, 55, 185-202.	2.3	35
796	Electrical and Optical Properties of Amorphous ITZO Deposited at Room Temperature by RF Magnetron Sputtering. Journal of the Korean Institute of Surface Engineering, 2014, 47, 239-243.	0.1	3
797	Transparent magnetic semiconductors from ferromagnetic amorphous alloys. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 176113.	0.5	4
798	Vertically Stacked Full Color Quantum Dots Phototransistor Arrays for Highâ€Resolution and Enhanced Colorâ€Selective Imaging. Advanced Materials, 2022, 34, e2106215.	21.0	23
799	Analysis of Interface Phenomena for High-Performance Dual-Stacked Oxide Thin-Film Transistors via Equivalent Circuit Modeling. ACS Applied Materials & Samp; Interfaces, 2021, 13, 51266-51278.	8.0	8
800	Realization of an Artificial Visual Nervous System using an Integrated Optoelectronic Device Array. Advanced Materials, 2021, 33, e2105485.	21.0	33
801	Printed Flexible Thin-Film Transistors. Springer Series in Materials Science, 2022, , 257-345.	0.6	1
802	Recent advancement in inorganic-organic electron transport layers in perovskite solar cell: current status and future outlook. Materials Today Chemistry, 2021, 22, 100595.	<b>3.</b> 5	17
803	Capacitance and Output Current Control by CNT Concentration in the CNT/PVDF Composite Films for Electronic Devices. Transactions of the Korean Institute of Electrical Engineers, 2013, 62, 1115-1119.	0.1	0
804	Semiconductor Materials. Springer Briefs in Electrical and Computer Engineering, 2014, , 75-85.	0.5	0
806	185 nm radiation measurement of high output low pressure mercury lamps. , 2015, , .		0
807	Metal Oxide Nanoparticle Engineering for Printed Electrochemical Applications. , 2016, , 783-818.		0
809	Nonvolatile Ferroelectric Memory Thin-Film Transistors Using a Poly(Vinylidene Fluoride) Tj ETQq0 0 0 rgBT /Overl	lock 10 Tf 0.8	50 107 Td (T 0
810	Design of Solution-Processed ZnO/SnO2 Heterostructures for High Performance Thin Film Transistors. , 0, , .		0

#	ARTICLE	IF	CITATIONS
811	Influence of Electron Beam Irradiation on the Electrical Properties of Zn-Sn-O Thin Film Transistor. Korean Journal of Materials Research, 2017, 27, 216-220.	0.2	1
812	Influence of Electron Beam Irradiation on the Electrical and Optical Properties of InGaZnO Thin Film Transistor. Korean Journal of Materials Research, 2017, 27, 345-349.	0.2	1
813	Enhancement of photocurrent and responsivity of Zn1-xMgxO (x=15%)-based ultraviolet detector by UV-ozone treatment. , 2019, , .		0
814	Improvement in performance characteristics of Zn(1-x)MgxO (x=15%) thin film transistor (TFT) with UV-ozone treatment. , 2019, , .		0
815	Enhancement in optical properties with suppression of defect states by UV-ozone processing in RF sputtered $Zn(1-x)MgxO$ (x=15%) thin film., 2019,,.		0
816	Enhancement in optical properties of ZnO nanorods by UV ozone treatment., 2019,,.		1
817	Sol-Gel Technology Adaptation of Nanostructured Zinc Oxide for Flexible Electronics. Technical Physics, 2019, 64, 1821-1826.	0.7	2
818	Microscopic and chemical analysis of room temperature UV laser annealing of solution-based zinc-tin-oxide thin films. Journal of Analytical Science and Technology, 2020, 11, .	2.1	2
819	Sol-Jel Yöntemiyle IGZO Partikþllerin Üretimi, Peletlenmesi ve Karakterizasyonu. Journal of Polytechnic, 0, , .	0.7	0
820	Photodeposited Polyamorphous CuO <sub><i>x</i></sub> Hole-Transport Layers in Organic Photovoltaics. ACS Applied Energy Materials, 2021, 4, 12900-12908.	5.1	5
821	Nonvolatile Ferroelectric Memory Thin-Film Transistors Using a Poly(Vinylidene Fluoride) Tj ETQq0 0 0 rgBT /Over Physics, 2020, , 241-261.	lock 10 Tf 0.8	50 347 Td ( <sup>-</sup> 0
822	Impact of UV-ozone annealing on the optical and structural properties of ZnO thin films and nanorods. , 2020, , .		0
823	A comparative study on the effect of UV-ozone annealing on the optical properties of ZnMgO thin films and nanorods. , 2020, , .		0
824	Stress-Released Amorphous Oxide/Carbon Nanotube CMOS Amplifier Circuits for Skin-Compatible Electronics. ACS Applied Electronic Materials, 0, , .	4.3	0
825	Giant Wrinkles on the Surface of Epitaxial BaTiO3 Thin Films with Drastic Shrinkage during Transfer from a MgO(100) Single-Crystal Substrate to a Flexible Polyethylene Terephthalate Sheet. Sensors, 2021, 21, 7326.	3.8	7
826	Toward low-temperature processing of lead zirconate titanate thin films: Advances, strategies, and applications. Applied Physics Reviews, 2021, 8, .	11.3	23
827	Anodization-induced ZrO <sub>x</sub> /AlO <sub>x</sub> stacked films for low-temperature, solution-processed indium oxide thin-film transistors. Journal Physics D: Applied Physics, 2021, 54, 025102.	2.8	1
828	High-performance YbTi <sub>X</sub> O <sub>y</sub> /PbZr <sub>0.53</sub> Ti <sub>0.47</sub> O <sub>3</sub> stacked gate dielectric for InGaZnO thin-film transistors. Semiconductor Science and Technology, 2020, 35, 105025.	2.0	0

#	Article	IF	CITATIONS
829	Thin Film Metal Oxides for Displays and Other Optoelectronic Applications. Environmental Chemistry for A Sustainable World, 2021, , 185-250.	0.5	5
830	Analog and Mixed Signal Circuit Design Techniques in Flexible Unipolar a-IGZO TFT Technology: Challenges and Recent Trends. IEEE Open Journal of Circuits and Systems, 2021, 2, 743-756.	1.9	12
831	Application of Laser Treatment in MOS-TFT Active Layer Prepared by Solution Method. Micromachines, 2021, 12, 1496.	2.9	2
832	Sol–gel preparation of Sn doped gallium oxide films for application in solar-blind ultraviolet photodetectors. Journal of Materials Science, 2022, 57, 1186-1197.	3.7	8
833	Efficient synthesis of enwrapped CuO@rGO nanowire arrays to improve supercapacitor electrode performance. Journal of Applied Electrochemistry, 2022, 52, 813-820.	2.9	3
834	UV-Assisted Annealing Effect on the Performance of an Electrolyte-Gated Transistor Based on Inkjet Printed ZnO Nanoparticles Blended With Zinc Nitrate. IEEE Transactions on Electron Devices, 2022, 69, 1538-1544.	3.0	5
835	Printed zinc tin oxide diodes: from combustion synthesis to large-scale manufacturing. Flexible and Printed Electronics, 2022, 7, 014005.	2.7	5
836	Engineering Bilayer AlOx /YAlOx Dielectric Stacks for Hysteresis-Free Switching in Solution-Processed Metal-Oxide Thin-Film Transistors. Frontiers in Electronics, 2022, 2, .	3.2	1
837	Combustion Synthesis and Polymer Doping of Metal Oxides for High-Performance Electronic Circuitry. Accounts of Chemical Research, 2022, 55, 429-441.	15.6	6
838	Niobium Tungsten Oxides for Electrochromic Devices with Long-Term Stability. ACS Nano, 2022, 16, 2621-2628.	14.6	44
839	A scalable, eco-friendly ultralow-temperature approach to forming Al <sub>2</sub> O <sub>3</sub> water-repellent cotton coatings <i>via</i> UV photo-annealing. Chemical Communications, 2022, 58, 4536-4539.	4.1	1
840	AlGaN Ultraviolet Micro-LEDs. IEEE Journal of Quantum Electronics, 2022, 58, 1-14.	1.9	18
841	Influence of UV/Ozone Treatment on Threshold Voltage Modulation in Sol–Gel IGZO Thinâ€Film Transistors. Advanced Materials Interfaces, 2022, 9, .	3.7	12
842	Temperature Estimation during Pulsed Laser Sintering of Silver Nanoparticles. Applied Sciences (Switzerland), 2022, 12, 3467.	2.5	10
844	Sensitive direct x-ray detectors based on the In–Ga–Zn–O/perovskite heterojunction phototransistor. Flexible and Printed Electronics, 2022, 7, 014013.	2.7	5
845	Flexible Sol-Gel—Processed Y2O3 RRAM Devices Obtained via UV/Ozone-Assisted Photochemical Annealing Process. Materials, 2022, 15, 1899.	2.9	8
846	Water-Processed Ultrathin Crystalline Indium–Boron–Oxide Channel for High-Performance Thin-Film Transistor Applications. Nanomaterials, 2022, 12, 1125.	4.1	1
847	Influence of the Micro-Nanostructuring of Titanium Dioxide Films on the Photocatalytic Degradation of Formic Acid under UV Illumination. Nanomaterials, 2022, 12, 1008.	4.1	3

#	Article	IF	Citations
848	Low-temperature and rapid photo-annealing process for metal-oxide thin-film transistors using combined excimer deep-ultraviolet and intensely pulsed light irradiation. Organic Electronics, 2022, 104, 106476.	2.6	3
849	All-in-one metal-oxide heterojunction artificial synapses for visual sensory and neuromorphic computing systems. Nano Energy, 2022, 97, 107171.	16.0	44
850	The effect of coordination environment on the activity and selectivity of single-atom catalysts. Coordination Chemistry Reviews, 2022, 461, 214493.	18.8	91
851	Transition metal-based single-atom catalysts (TM-SACs); rising materials for electrochemical CO2 reduction. Journal of Energy Chemistry, 2022, 70, 444-471.	12.9	44
852	Viable strategy to minimize trap states of patterned oxide thin films for both exceptional electrical performance and uniformity in sol–gel processed transistors. Chemical Engineering Journal, 2022, 441, 135833.	12.7	7
853	Understanding the Origin of the Hysteresis of High-Performance Solution Processed Polycrystalline SnO2 Thin-Film Transistors and Applications to Circuits. Membranes, 2022, 12, 7.	3.0	8
854	Solution-processed metal oxide dielectric films: Progress and outlook. APL Materials, 2021, 9, .	5.1	5
855	A new dimension for magnetosensitive e-skins: active matrix integrated micro-origami sensor arrays. Nature Communications, 2022, 13, 2121.	12.8	34
857	Improved Electrical Performance of Inâ,,Oâ, $f$ Thin-Film Transistor by UV/Ozone Treatment. IEEE Journal of the Electron Devices Society, 2022, 10, 379-386.	2.1	1
858	Doping Free and Amorphous NiO <sub>x</sub> Film via UV Irradiation for Efficient Inverted Perovskite Solar Cells. Advanced Science, 2022, 9, e2201543.	11.2	23
859	Positive-Bias Stress Stability of Solution-Processed Oxide Semiconductor Thin-Film Transistor. IEEE Transactions on Electron Devices, 2022, 69, 3727-3731.	3.0	2
860	UV-Treated ZrO <sub>2</sub> Passivation for Transparent and High-Stability In <sub>2</sub> O <sub>3</sub> Thin Film Transistor. IEEE Transactions on Electron Devices, 2022, 69, 3722-3726.	3.0	7
861	Enhanced Optoelectronic Properties of Solution-Processed Metal-Chalcogenide Devices Via Hydrogen-Driven Post-Annealing. SSRN Electronic Journal, 0, , .	0.4	0
862	Active Matrix Flexible Sensory Systems: Materials, Design, Fabrication, and Integration. Advanced Intelligent Systems, 2022, 4, .	6.1	9
864	Plasmonic metal oxides and their biological applications. Materials Horizons, 2022, 9, 2288-2324.	12.2	7
865	Solution-Processed HfO2/Y2O3 Multilayer Si-Based MOS Capacitors Photoactivated by Deep-Ultraviolet Radiation. Journal of Electronic Materials, 0, , .	2.2	1
866	Direct Optical Patterning of Nanocrystal-Based Thin-Film Transistors and Light-Emitting Diodes through Native Ligand Cleavage. ACS Applied Nano Materials, 2022, 5, 8457-8466.	5.0	7
867	Analysis of Low-Frequency Noise in Quantum Dot/Metal-Oxide Phototransistors With Metal Chalcogenide Interfaces. IEEE Electron Device Letters, 2022, 43, 1499-1502.	3.9	5

#	ARTICLE	IF	CITATIONS
868	Pâ€38: Lowâ€Power aâ€IGZO TFT Shift Register Featuring iâ€PUA Gate Dielectric. Digest of Technical Papers SID International Symposium, 2022, 53, 1192-1195.	0.3	0
869	Indium and Tin Doping of Zinc Oxide Film by Cation Exchange and its Application to Lowâ€Temperature Thinâ€Film Transistors. Advanced Materials Interfaces, 2022, 9, .	3.7	4
870	Reduction mechanism of spent ITO target in CaCl2 molten salt. Separation and Purification Technology, 2022, 299, 121778.	7.9	4
871	Selfâ€Alignment Embedded Thinâ€Film Transistor with High Transparency and Optimized Performance. Advanced Materials Technologies, 2022, 7, .	5.8	2
872	Performance Enhancement of In2O3 Thin-Film Transistors via Multi-Spin Coating Combined with UV-Assisted Thermal Annealing. Journal of Electronic Materials, 2022, 51, 6297-6304.	2.2	3
873	High density integration of stretchable inorganic thin film transistors with excellent performance and reliability. Nature Communications, 2022, $13$ , .	12.8	14
874	Molecular Exchange of Dynamic Imine Bond for the Etching of Polymer Particles. Macromolecular Rapid Communications, 0, , 2200562.	3.9	1
875	Direct fabrication of single-phase multiferroic BiFe0.95Co0.05O3 films on polyimide substrates for flexible memory. Thin Solid Films, 2022, 758, 139424.	1.8	2
876	Enhanced optoelectronic properties of solution-processed metal-chalcogenide devices via hydrogen-driven post-annealing. Journal of Alloys and Compounds, 2022, 926, 166780.	5.5	0
877	Non-vacuum room temperature-processed sintering method of molybdenum pattern by intense pulsed light irradiation for high-performance electronic devices. Thin Solid Films, 2022, 759, 139468.	1.8	2
878	Low-temperature solution-processed high-capacitance AlOx dielectrics for low-voltage carbon-based transistors. Organic Electronics, 2022, 110, 106636.	2.6	2
879	Gamma relaxation in Dy-based metallic glasses and its correlation with plasticity. Scripta Materialia, 2023, 222, 115017.	5.2	8
880	Hole transport free carbon-based high thermal stability CsPbI <sub>1.2</sub> Br <sub>1.8</sub> solar cells with an amorphous InGaZnO <sub>4</sub> electron transport layer. Physical Chemistry Chemical Physics, 2022, 24, 18896-18904.	2.8	2
881	Rhodamine 6G and phloxine B as photosensitizers for inkjet-printed indium oxide phototransistors. Journal of Materials Chemistry C, 2022, 10, 15126-15136.	5.5	1
882	Readily Accessible Metallic Microâ€Island Arrays for Highâ€Performance Metal Oxide Thinâ€Film Transistors. Advanced Materials, 2022, 34, .	21.0	4
883	Thermal Annealing-Free SnO <sub>2</sub> for Fully Room-Temperature-Processed Perovskite Solar Cells. ACS Applied Materials & Samp; Interfaces, 2022, 14, 41037-41044.	8.0	5
884	Pseudocapacitive porous amorphous vanadium pentoxide with enhanced multicolored electrochromism. Chemical Engineering Journal, 2023, 452, 139655.	12.7	10
885	Aqueous Solution-Grown Crystalline Phosphorus Doped Indium Oxide for Thin-Film Transistors Applications. International Journal of Molecular Sciences, 2022, 23, 12912.	4.1	О

#	Article	IF	CITATIONS
886	Single-Atom Catalysts: Preparation and Applications in Environmental Catalysis. Catalysts, 2022, 12, 1239.	3 <b>.</b> 5	9
887	High-performance ITO/a-IGZO heterostructure TFTs enabled by thickness-dependent carrier concentration and band alignment manipulation. Ceramics International, 2023, 49, 5905-5914.	4.8	7
888	Low-Temperature Solution-Processed ZnSnO Ozone Gas Sensors Using UV-Assisted Thermal Annealing. Journal of the Electrochemical Society, 0, , .	2.9	5
889	Ultra-large dynamic range synaptic indium gallium zinc oxide transistors. Applied Materials Today, 2022, 29, 101648.	4.3	5
890	Carbon nanotube-based flexible high-speed circuits with sub-nanosecond stage delays. Nature Communications, 2022, 13, .	12.8	22
891	Resolving the Unusual Gate Leakage Currents of Thin-Film Transistors with Single-Walled Carbon-Nanotube-Based Active Layers. Electronics (Switzerland), 2022, 11, 3719.	3.1	1
892	Highly adaptive and energy efficient neuromorphic computation enabled by deep-spike heterostructure photonic neuro-transistors. Nano Energy, 2022, 104, 107991.	16.0	2
893	Highâ€Quality Artery Monitoring and Pathology Imaging Achieved by Highâ€Performance Synchronous Electrical and Optical Output of Nearâ€Infrared Organic Photodetector. Advanced Science, 2023, 10, .	11.2	11
894	NIR Laser Integration of Photodetector on 3D Printed Chamber for Colorimetric Biosensing. Advanced Materials Technologies, 2023, 8, .	5.8	3
895	How to print high-mobility metal oxide transistorsâ€"Recent advances in ink design, processing, and device engineering. Applied Physics Letters, 2022, 121, 220502.	3.3	3
896	Analysis of the Annealing Budget of Metal Oxide Thinâ€Film Transistors Prepared by an Aqueous Bladeâ€Coating Process. Advanced Functional Materials, 2023, 33, .	14.9	5
897	Synthesis of Vacancy-Controlled Copper Iodide Semiconductor for High-Performance p-Type Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2022, 14, 56416-56426.	8.0	6
898	Synthesis of Ultrafine Platinum Nanocatalysts by Iceâ€photochemical Method and Their Application in Catalytic Degradation of 4â€nitrophenol. ChemistrySelect, 2022, 7, .	1.5	0
899	Low-temperature crystallization of indium oxide thin films with a photoactivable additive. Applied Physics Letters, 2022, 121, .	3.3	2
900	<i>In situ</i> photogenerated hydroxyl radicals in the reaction atmosphere for the accelerated crystallization of solution-processed functional metal oxide thin films. Journal of Materials Chemistry C, 0, , .	5.5	5
901	Optimizing Photonic Annealing Technique for High- <i>k</i> Dielectric of Full-Solution-Processed Oxide Thin Film Transistor. IEEE Transactions on Electron Devices, 2023, 70, 550-555.	3.0	1
902	Field-Effect Mobility Extraction of Solution-Processed InGaZnO Thin-Film Transistors Considering Dielectric Dispersion Behavior of AlO <sub><i>x</i></sub> Gate Insulator. ACS Applied Electronic Materials, 2023, 5, 1035-1040.	4.3	1
903	Fully Sprayed Metal Oxide Transistors Utilizing Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene Contacts. ACS Applied Electronic Materials, 2023, 5, 784-793.	4.3	2

#	Article	IF	CITATIONS
904	High-speed hybrid complementary ring oscillators based on solution-processed organic and amorphous metal oxide semiconductors. Communications Materials, 2023, 4, .	6.9	1
905	Nanomaterial-Based Synaptic Optoelectronic Devices for In-Sensor Preprocessing of Image Data. ACS Omega, 2023, 8, 5209-5224.	3.5	8
906	Seed layer engineering for crack-free sol–gel Alumina deposition on GFETs. Materials Science in Semiconductor Processing, 2023, 158, 107348.	4.0	1
907	Aqueous electrolyte-gated solution-processed metal oxide transistors for direct cellular interfaces. APL Bioengineering, 2023, 7, .	6.2	3
908	High-Performance Photodetector with a-IGZO/PbS Quantum Dots Heterojunction. ACS Photonics, 2023, 10, 790-800.	6.6	17
909	Oxide TFTs with S/D-contacts patterned by high-resolution reverse-offset printed resist layers. Flexible and Printed Electronics, 2023, 8, 015017.	2.7	0
910	Room-Temperature Photodeposited Amorphous VO <sub><i>x</i></sub> Hole-Transport Layers for Organic Devices. Chemistry of Materials, 2023, 35, 2353-2362.	6.7	3
911	Stop and restart of polycondensation reactions of highly reactive sol–gel precursors for nanoscale surface molding. Materials Chemistry Frontiers, 0, , .	5.9	0
912	Low-temperature solution processing route for potassium sodium niobate (KNN) thin films. Journal of the European Ceramic Society, 2023, 43, 4740-4747.	5.7	1
913	Flexible Oxide Thin Film Transistors, Memristors, and Their Integration. Advanced Functional Materials, 2023, 33, .	14.9	13
914	Photonically Cured Solution-Processed SnO <sub>2</sub> Thin Films for High-Efficiency and Stable Perovskite Solar Cells and Minimodules. ACS Applied Energy Materials, 2023, 6, 3996-4006.	5.1	0
915	Heterojunction oxide thin film transistors: a review of recent advances. Journal of Materials Chemistry C, 2023, 11, 5241-5256.	5.5	3
916	Inkjetâ€Printed pâ€NiO/nâ€ZnO Heterojunction Diodes for Photodetection Applications. Advanced Materials Interfaces, 2023, 10, .	3.7	2
917	The impact of nickel doping on metal-oxide network in solution-processed indium zinc oxide transistors. Materials Today Communications, 2023, 35, 106221.	1.9	0
918	Super Flexible and High Mobility Inorganic/Organic Composite Semiconductors for Printed Electronics on Polymer Substrates. Advanced Materials Technologies, 2023, 8, .	5.8	1
919	Enhancement of electrical stability of metal oxide thin-film transistors against various stresses. Journal of Materials Chemistry C, 2023, 11, 7121-7143.	5 <b>.</b> 5	3
920	Low-Temperature Fabrication of Indium Oxynitride Thin-Film Transistors via Plasma-Assisted Solution Process. IEEE Transactions on Electron Devices, 2023, 70, 3598-3604.	3.0	3
921	Improvement in Switching Characteristics and Bias Stability of Solution-Processed Zinc–Tin Oxide Thin Film Transistors via Simple Low-Pressure Thermal Annealing Treatment. Nanomaterials, 2023, 13, 1722.	4.1	0

#	Article	IF	CITATIONS
922	Effects of Ti Doping on the Electrical Properties and Gate-Bias Stability of Amorphous Zinc–Tin–Oxide Thin-Film Transistors. ACS Applied Electronic Materials, 2023, 5, 3416-3425.	4.3	1
923	Recent advances of In2O3-based thin-film transistors: A review. Applied Surface Science Advances, 2023, 16, 100423.	6.8	4
925	Ultrasensitive Detection of SARSâ€CoVâ€'2 by Flexible Metal Oxide Fieldâ€Effect Transistors. Advanced Functional Materials, 2023, 33, .	14.9	2
926	Recent Progress in Fluorinated Dielectricâ€Based Organic Fieldâ€Effect Transistors and Applications. , 0, ,		0
927	Rapid laser-induced low temperature crystallization of thermochromic VO2 sol-gel thin films. Applied Surface Science, 2023, 631, 157507.	6.1	2
928	Laser Direct Writing of Sol–Gel-Derived Vacancy-Rich Functional Oxide Semiconductors. ACS Nano, 2023, 17, 10033-10040.	14.6	1
929	Flexible and low-voltage ITO synaptic transistors for biotic tactile sensing. Applied Physics Letters, 2023, 123, .	3.3	0
932	Physicochemical Analysis of Nanoscale Metal Oxide Thin Film Precursors via Infrared Spectroscopic Ellipsometry. Journal of Physical Chemistry C, 2023, 127, 15876-15886.	3.1	0
933	Room-temperature fabrication of flexible oxide TFTs by co-sputtering of IGZO and ITO. Flexible and Printed Electronics, 2023, 8, 035005.	2.7	0
934	Room-temperature processed TiO <sub>2</sub> to construct composite electron transport layers for efficient planar perovskite solar cells. Journal of Materials Chemistry A, 2023, 11, 22206-22215.	10.3	2
935	Low-Temperature Enhancement-Mode Amorphous Oxide Thin-Film Transistors in Solution Process Using a Low-Pressure Annealing. Nanomaterials, 2023, 13, 2231.	4.1	1
936	Printing flexible thin-film transistors. Applied Physics Reviews, 2023, 10, .	11.3	0
937	Emerging applications of metal-oxide thin films for flexible and stretchable electronic devices. Applied Physics Reviews, 2023, 10, .	11.3	1
938	Solution Processing of Functional Thin Films and Their Device Applications. Electrochemistry, 2023, 91, 101007-101007.	1.4	1
939	Assessment of trapping layer control in IGZO/Al2O3/Ga2O3 synaptic transistor for neuromorphic computing. Materials Today Physics, 2023, 37, 101194.	6.0	0
941	Atomically Thin Amorphous Indium–Oxide Semiconductor Film Developed Using a Solution Process for High-Performance Oxide Transistors. Nanomaterials, 2023, 13, 2568.	4.1	1
942	Bi-layered plasmonic photothermal nanocomposite heater for laser-irradiation based rapid digital annealing of metal and oxide films. Applied Surface Science, 2024, 642, 158610.	6.1	0
943	Continuous-Wave Green Laser Activation of Transparent InZnO Electrodes for Fully Solution-Processed Oxide Thin-Film Transistors. ACS Applied Electronic Materials, 0, , .	4.3	0

#	Article	IF	CITATIONS
944	Geometrically designed amorphous oxide semiconductor heterojunction thin-film transistors for enhanced electrical performance and stability. Applied Physics Express, $0, , .$	2.4	0
945	Highly Stretchable, Sensitive, and Multifunctional Thermoelectric Fabric for Synergistic-Sensing Systems of Human Signal Monitoring. Advanced Fiber Materials, 0, , .	16.1	1
946	Electrospun Highly Aligned IGZO Nanofiber Arrays with Lowâ€Thermalâ€Budget for Challenging Transistor and Integrated Electronics. Advanced Functional Materials, 2024, 34, .	14.9	3
949	Facile interfacial defect healing in solution-processed In-Ga-Zn-O thin film transistor through rapid intense pulsed light annealing. Surfaces and Interfaces, 2024, 44, 103751.	3.0	0
950	Influence of NF3 Plasma-Treated HfO2 Gate Insulator Surface on Tin Oxide Thin-Film Transistors. Materials, 2023, 16, 7172.	2.9	0
951	Solution-Processed Aluminum-Zirconium Oxide as a Gate Dielectric for InGaZnO Thin Film Transistors. Journal of Electrical Engineering and Technology, 0, , .	2.0	0
952	Paperâ€Based Lead Sulfide Quantum Dot Heterojunction Photodetectors. Advanced Materials Technologies, 2024, 9, .	5.8	0
953	Metal-Oxide Heterojunction: From Material Process to Neuromorphic Applications. Sensors, 2023, 23, 9779.	3.8	0
954	Improved resistive switching performance of amorphous InGaZnO-based memristor with the TiO2 insertion layer. Ceramics International, 2023, , .	4.8	0
955	Reliable synaptic plasticity of InGaZnO transistor with TiO2 interlayer. Nanotechnology, 0, , .	2.6	0
956	Preparation of Low-Defect Aluminum-Doped Zinc Oxide Nanostructure-Based Compact Layer by Vacuum Ultraviolet Irradiation for Quantum Dot-Sensitized Solar Cells. ACS Applied Nano Materials, 2023, 6, 23515-23523.	5.0	0
957	Low temperature plasma deposited SiO2/organosilicon stacked film for transparent gate dielectric of InGaZnO thin film transistor. Thin Solid Films, 2024, 789, 140174.	1.8	0
958	Alcohol splitting with bipolar membranes for the production of metal alkoxides: Alcohol splitting behaviour and ion transport kinetics. Chemical Engineering Science, 2024, 286, 119657.	3.8	1
959	Sputter-grown two-dimensional α-MoO3 thin films: Microstructure dependence on growth conditions. Journal of Alloys and Compounds, 2024, 976, 173272.	5.5	0
960	Metal oxides in quantum-dot-based LEDs and their applications. , 2024, , 409-442.		0
961	Synthesizing nuclear power plant fouling with fractal characteristics enables an in-depth study of concerned nuclear safety issues. IScience, 2024, 27, 108789.	4.1	1
962	Toward Smart, Flexible, and Omnidirectional Self-Powered Photodetection by an All-Solution-Processed In <sub>2</sub> O <sub>3</sub> /Pbl <sub>2</sub> Heterojunction. ACS Applied Materials & Samp; Interfaces, 2024, 16, 3685-3693.	8.0	1
963	Stable switching behavior of low-temperature ZrO2 RRAM devices realized by combustion synthesis-assisted photopatterning. Journal of Materials Science and Technology, 2024, 189, 68-76.	10.7	0

#	ARTICLE	IF	CITATIONS
964	Intense pulsed light annealing of solution-based indium–gallium–zinc–oxide semiconductors with printed Ag source and drain electrodes for bottom gate thin film transistors. Scientific Reports, 2024, 14, .	3.3	0
965	Lowâ€Temperature, Universal Synthetic Route for Mesoporous Metal Oxides by Exploiting Synergistic Effect of Thermal Activation and Plasma. Advanced Materials, 2024, 36, .	21.0	0
966	Self-Assembled Monolayers of Push–Pull Chromophores as Active Layers and Their Applications. Molecules, 2024, 29, 559.	3.8	0
967	Large Size and High Resolution Organic Light Emitting Diodes Based on the In-Ga-Zn-O Thin Film Transistors with a Coplanar Structure. Korean Journal of Materials Research, 2023, 33, 511-516.	0.2	0
968	Light Effect on Amorphous Tin Oxide Thinâ€Film Transistors. Advanced Photonics Research, 2024, 5, .	3.6	0
969	Synthesis of Silicon and Germanium Oxide Nanostructures via Photonic Curing; a Facile Approach to Scale Up Fabrication. ChemistryOpen, 0, , .	1.9	0
970	Developing flexible QLEDs using metal oxide and polymer combination. Optical Materials, 2024, 149, 115041.	3.6	0
971	Dual External Electron Injection Barrier Layers Enable Highâ€Performance Nearâ€Infrared Organic Photodetectors Realizing Realâ€Time Heart Rate Monitoring. Advanced Optical Materials, 0, , .	7.3	0
972	Dependence of Positive Bias Stress Instability on Threshold Voltage and Its Origin in Solution-Processed Aluminum-Doped Indium Oxide Thin-Film Transistors. Nanomaterials, 2024, 14, 466.	4.1	0
973	Solutionâ€Processed Metal Oxide Thinâ€Film Transistor at Low Temperature via A Combination Strategy of H <sub>2</sub> O <sub>2</sub> â€Inducement Technique and Infrared Irradiation Annealing. Small Methods, 0, , .	8.6	0
974	Highâ€Performance Nd: AlZO/Al <sub>2</sub> O <sub>3</sub> Dual Active Layer Design Without Thermal Annealing: Highâ€Speed Electron Transport and Defect Modification in Thin Film Transistors. Advanced Engineering Materials, 2024, 26, .	3.5	0
975	High-Quality TiO <sub>2</sub> Electron Transport Film Prepared via Vacuum Ultraviolet Illumination for MAPbI <sub>3</sub> Perovskite Solar Cells. Inorganic Chemistry, 2024, 63, 5709-5717.	4.0	O