

Ling Yan Liang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/5403920/ling-yan-liang-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

101
papers

2,157
citations

25
h-index

43
g-index

105
ext. papers

2,579
ext. citations

4.9
avg, IF

4.86
L-index

#	Paper	IF	Citations
101	Praseodymium-Doped In-Sn-Zn-O TFTs With Effective Improvement of Negative-Bias Illumination Stress Stability. <i>IEEE Transactions on Electron Devices</i> , 2022 , 69, 152-155	2.9	6
100	Optimization of sensing-pad functionalizing strategy toward separative extended-gate FET biosensors for PSA detection.. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2022 , 211, 114597	3.5	2
99	Interfacial Charge Transfer and Zinc Ion Intercalation and Deintercalation Dynamics in Flexible Multicolor Electrochromic Energy Storage Devices. <i>ACS Applied Energy Materials</i> , 2022 , 5, 88-97	6.1	5
98	Annealing induced morphology evolution and phase transition in SnOx thin films grown by e-beam evaporation method. <i>Inorganic Chemistry Communication</i> , 2022 , 140, 109473	3.1	0
97	Air Nanocolumn-SiO2 composite film with adjustable anisotropic refractive index. <i>Materials Today Physics</i> , 2022 , 26, 100722	8	
96	Aluminum-ion-intercalation nickel oxide thin films for high-performance electrochromic energy storage devices. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 17427-17436	7.1	0
95	Huge mobility enhancement of InSnZnO thin-film transistors via Al-induced microstructure regularization. <i>Applied Physics Letters</i> , 2021 , 119, 212102	3.4	4
94	Mechanistic insights into the dry prelithiated WO3 thin films in electrochromic devices. <i>Solid State Ionics</i> , 2021 , 373, 115814	3.3	0
93	Effects of Target Quality on Electrical Performance and Stability of In-Sn-Zn-O Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2021 , 42, 529-532	4.4	4
92	Long-term-stable WO3-PB complementary electrochromic devices. <i>Journal of Alloys and Compounds</i> , 2021 , 861, 158534	5.7	15
91	Ultrafast Carrier Dynamics of Amorphous Zinc Tin Oxide Graded Thin Films. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 9350-9355	3.8	1
90	A Self-Bleaching Electrochromic Mirror Based on Metal Organic Frameworks. <i>Materials</i> , 2021 , 14,	3.5	2
89	Solution-processed amorphous p-type Cu-Sn-I thin films for transparent Cu-Sn-I/IGZO p-n junctions. <i>Applied Physics Letters</i> , 2021 , 118, 222107	3.4	1
88	IGZO/CsPbBr-Nanoparticles/IGZO Neuromorphic Phototransistors and Their Optoelectronic Coupling Applications. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 30165-30173	9.5	9
87	Crystal Orientation-Dependent Oxidation of Epitaxial TiN Films with Tunable Plasmonics. <i>ACS Photonics</i> , 2021 , 8, 847-856	6.3	6
86	29.2: Invited Paper: Investigation on the Electrical Performance and Stability of InSnZnO Thin-Film Transistors. <i>Digest of Technical Papers SID International Symposium</i> , 2021 , 52, 399-399	0.5	
85	P-1.9: Huge Mobility Enhancement of ITZO TFTs achieved via Ta-Induced Crystallization. <i>Digest of Technical Papers SID International Symposium</i> , 2021 , 52, 700-700	0.5	

84	P-1.11: Effects of Source and Drain Contacts on Electrical Performance of Oxide Thin-Film Transistors. <i>Digest of Technical Papers SID International Symposium, 2021, 52, 702-702</i>	0.5	
83	P-1.10: Pr-doped ITZO TFTs with Improved Negative-Bias Illumination Stability. <i>Digest of Technical Papers SID International Symposium, 2021, 52, 701-701</i>	0.5	
82	Boosting charge-transfer kinetics and cyclic stability of complementary WO ₃ /NiO electrochromic devices via SnOx interfacial layer. <i>Journal of Science: Advanced Materials and Devices, 2021, 6, 494-500</i>	4.2	5
81	In situ TEM investigation of hexagonal WO ₃ irreversible transformation to Li ₂ WO ₄ . <i>Scripta Materialia, 2021, 203, 114090</i>	5.6	2
80	Substrate-bias-aided preparation and properties of amorphous gallium oxide films and their deep-ultraviolet photodetectors. <i>Ceramics International, 2021, 47, 32138-32143</i>	5.1	1
79	Solution-processed amorphous Ga ₂ O ₃ :CdO TFT-type deep-UV photodetectors. <i>Applied Physics Letters, 2020, 116, 192102</i>	3.4	14
78	Direct Growth of Vertically Orientated Nanocavity Arrays for Plasmonic Color Generation. <i>Advanced Functional Materials, 2020, 30, 2002287</i>	15.6	18
77	Separative extended-gate AlGaAs/GaAs HEMT biosensors based on capacitance change strategy. <i>Applied Physics Letters, 2020, 116, 123704</i>	3.4	9
76	Specific phase modulation and infrared photon confinement in solar selective absorbers. <i>Applied Materials Today, 2020, 18, 100533</i>	6.6	6
75	Broadband Optoelectronic Synaptic Thin-Film Transistors Based on Oxide Semiconductors. <i>Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900630</i>	2.5	10
74	Tin oxide-based thin-film transistors and their circuits 2020, 441-476		5
73	Electrochromism of Nanocrystal-in-Glass Tungsten Oxide Thin Films under Various Conduction Cations. <i>Inorganic Chemistry, 2019, 58, 2089-2098</i>	5.1	29
72	Optoelectronic neuromorphic thin-film transistors capable of selective attention and with ultra-low power dissipation. <i>Nano Energy, 2019, 62, 772-780</i>	17.1	48
71	Aqueous solution-processed, self-flattening AlOx:Y dielectrics for fully-transparent thin-film transistors. <i>Ceramics International, 2019, 45, 15883-15891</i>	5.1	4
70	Improving Negative-Bias-Temperature-Stress Stability for Thin-Film Transistors by Doping Mg Into ScInO Semiconductor. <i>IEEE Transactions on Electron Devices, 2019, 66, 2620-2623</i>	2.9	2
69	50.4: Invited Paper: Photonic neuromorphic thin-film transistors with ultra-low power dissipation. <i>Digest of Technical Papers SID International Symposium, 2019, 50, 566-566</i>	0.5	
68	Broadband hyperbolic metamaterial covering the whole visible-light region. <i>Optics Letters, 2019, 44, 2970-2973</i>	3	7
67	Inkjet-Printed Self-Aligned Short-Channel Metal-Oxide Thin-Film Transistors Based on Coffee Stripe Dewetting Method. <i>IEEE Electron Device Letters, 2019, 40, 228-231</i>	4.4	1

66	Flexible Electrochromic V ₂ O ₅ Thin Films with Ultrahigh Coloration Efficiency on Graphene Electrodes. <i>Journal of the Electrochemical Society</i> , 2018 , 165, D183-D189	3.9	18
65	High-Performance Visible-Blind Ultraviolet Photodetector Based on IGZO TFT Coupled with p-n Heterojunction. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 8102-8109	9.5	67
64	Design, Properties, and TFT Application of Solution-Processed In-Ga-Cd-O Thin Films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018 , 12, 1800034	2.5	5
63	Structural and Electrochromic Properties of Undoped and Mo-Doped V ₂ O ₅ Thin Films by a Two-Electrode Electrodeposition. <i>Journal of Nanoscience and Nanotechnology</i> , 2018 , 18, 7502-7507	1.3	3
62	Solution-processed Ga ₂ O ₃ thin-films with tunable bandgaps and their transistors. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 335101	3	2
61	Band Offset Engineering in ZnSnN ₂ -Based Heterojunction for Low-Cost Solar Cells. <i>ACS Photonics</i> , 2018 , 5, 2094-2099	6.3	25
60	Thin Film Solar Cell Based on ZnSnN ₂ /SnO Heterojunction. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018 , 12, 1700332	2.5	22
59	Aqueous Solution Induced High-Dielectric-Constant AlO _x :Y Films for Thin-Film Transistor Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2018 , 18, 7566-7572	1.3	3
58	Fully solution-processed metal oxide thin-film transistors via a low-temperature aqueous route. <i>Ceramics International</i> , 2017 , 43, 6130-6137	5.1	39
57	Carrier trapping anisotropy in ambipolar SnO thin-film transistors. <i>Solid-State Electronics</i> , 2017 , 129, 88-92	10	10
56	Template-Free Growth of Well-Ordered Silver Nano Forest/Ceramic Metamaterial Films with Tunable Optical Responses. <i>Advanced Materials</i> , 2017 , 29, 1605324	24	32
55	Ultrasensitive Memristive Synapses Based on Lightly Oxidized Sulfide Films. <i>Advanced Materials</i> , 2017 , 29, 1606927	24	127
54	Coexistence of two types of metal filaments in oxide memristors. <i>AIP Advances</i> , 2017 , 7, 025102	1.5	4
53	Ultrafast carrier dynamics in type-II ZnO-SnO heterostructure thin films. <i>Applied Physics Letters</i> , 2017 , 110, 172102	3.4	4
52	High-temperature tolerance in WTi-Al ₂ O ₃ cermet-based solar selective absorbing coatings with low thermal emissivity. <i>Nano Energy</i> , 2017 , 37, 232-241	17.1	84
51	Combined control of the cation and anion to make ZnSnON thin films for visible-light phototransistors with high responsivity. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 6480-6487	7.1	7
50	The same batch enabled threshold voltage tuning for vertically- or laterally-gated transparent InZnO thin-film transistors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600918	16	18
49	Polarity Control of GaN and Realization of GaN Schottky Barrier Diode Based on Lateral Polarity Structure. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4424-4429	2.9	10

48	Proton conducting sodium-alginate-gated oxide thin-film transistors with varying device structure. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 3103-3109	1.6	4
47	A Direct Method to Extract Transient Sub-Gap Density of State (DOS) Based on Dual Gate Pulse Spectroscopy. <i>Scientific Reports</i> , 2016 , 6, 24096	4.9	9
46	Threshold Voltage Tuning in a-IGZO TFTs With Ultrathin SnO _x Capping Layer and Application to Depletion-Load Inverter. <i>IEEE Electron Device Letters</i> , 2016 , 37, 422-425	4.4	24
45	Effect of post-annealing on structural and electrochromic properties of Mo-doped V ₂ O ₅ thin films. <i>Journal of Sol-Gel Science and Technology</i> , 2016 , 77, 604-609	2.3	13
44	Plasmonic AgAl Bimetallic Alloy Nanoparticle/Al ₂ O ₃ Nanocermet Thin Films with Robust Thermal Stability for Solar Thermal Applications. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600248	4.6	20
43	The electrical properties of n-ZnO/p-SnO heterojunction diodes. <i>Applied Physics Letters</i> , 2016 , 109, 123504	3.4	15
42	Anomalous rectification in a purely electronic memristor. <i>Applied Physics Letters</i> , 2016 , 109, 143505	3.4	14
41	Semiconducting ZnSnN ₂ thin films for Si/ZnSnN ₂ p-n junctions. <i>Applied Physics Letters</i> , 2016 , 108, 142104	3.4	44
40	Extended-gate-type IGZO electric-double-layer TFT immunosensor with high sensitivity and low operation voltage. <i>Applied Physics Letters</i> , 2016 , 109, 173501	3.4	19
39	Synaptic devices based on purely electronic memristors. <i>Applied Physics Letters</i> , 2016 , 108, 013504	3.4	52
38	Control of Ambipolar Transport in SnO Thin-Film Transistors by Back-Channel Surface Passivation for High Performance Complementary-like Inverters. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 17023-31	9.5	63
37	Tunable crystallographic grain orientation and Raman fingerprints of polycrystalline SnO thin films. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 1077-1081	7.1	21
36	Determination of the basic optical parameters of ZnSnN(2). <i>Optics Letters</i> , 2015 , 40, 1282-5	3	39
35	Ultrafast carrier dynamics in SnO _x thin films. <i>Applied Physics Letters</i> , 2015 , 106, 102103	3.4	10
34	Single-crystalline metal filament-based resistive switching in a nitrogen-doped carbon film containing conical nanopores. <i>Applied Physics Letters</i> , 2015 , 106, 083104	3.4	17
33	Mechanism for resistive switching in chalcogenide-based electrochemical metallization memory cells. <i>AIP Advances</i> , 2015 , 5, 057125	1.5	41
32	Determination of some basic physical parameters of SnO based on SnO/Si pn heterojunctions. <i>Applied Physics Letters</i> , 2015 , 106, 132102	3.4	43
31	Aqueous Solution-Deposited Gallium Oxide Dielectric for Low-Temperature, Low-Operating-Voltage Indium Oxide Thin-Film Transistors: A Facile Route to Green Oxide Electronics. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 14720-5	9.5	55

30	Alloyed nanoparticle-embedded alumina nanocermet film: A new attempt to improve the thermotolerance. <i>Applied Surface Science</i> , 2015 , 331, 285-291	6.7	11
29	Silver nanoparticles with an armor layer embedded in the alumina matrix to form nanocermet thin films with sound thermal stability. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 11550-7	9.5	23
28	Substrate biasing effect on the physical properties of reactive RF-magnetron-sputtered aluminum oxide dielectric films on ITO glasses. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2255-61	9.5	30
27	Magnetron-Sputtered SnO Thin Films for p-Type and Ambipolar TFT Applications. <i>ECS Journal of Solid State Science and Technology</i> , 2014 , 3, Q3091-Q3094	2	31
26	Forming-free resistive switching in a nanoporous nitrogen-doped carbon thin film with ready-made metal nanofilaments. <i>Carbon</i> , 2014 , 76, 459-463	10.4	16
25	Ambipolar SnO Thin-Film Transistors and Inverters. <i>ECS Transactions</i> , 2013 , 50, 289-297	1	7
24	Thermal aging characteristics of CrN _x O _y solar selective absorber coating for flat plate solar thermal collector applications. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 114, 186-191	6.4	49
23	Influence of the substrate bias voltage on the physical properties of dc reactive sputtered Ta ₂ O ₅ films. <i>Journal of Alloys and Compounds</i> , 2013 , 550, 258-262	5.7	8
22	Anomalous bias-stress-induced unstable phenomena of InZnO thin-film transistors using Ta ₂ O ₅ gate dielectric. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 205103	3	25
21	Structural, chemical, optical, and electrical evolution of SnO(x) films deposited by reactive rf magnetron sputtering. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 5673-7	9.5	93
20	The structural, optical and electrical properties of Y-doped SnO thin films and their p-type TFT application. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 085101	3	37
19	Ambipolar inverters using SnO thin-film transistors with balanced electron and hole mobilities. <i>Applied Physics Letters</i> , 2012 , 100, 263502	3.4	72
18	Effects of sputtering pressure and post-metallization annealing on the physical properties of rf-sputtered Y ₂ O ₃ films. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 5810-5815	5.7	8
17	Structural and electrical characteristics of RF sputtered YON gate dielectrics and their thin-film transistor applications. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 155403	3	4
16	Enhancement of a-IZO TTFT Performance by Using Y ₂ O ₃ /Al ₂ O ₃ Bilayer Dielectrics. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, H88		10
15	The two- to three-dimensional growth transition of InAs/GaAs epitaxy layer studied by reflectance difference spectroscopy. <i>Journal of Applied Physics</i> , 2010 , 108, 083513	2.5	7
14	High-performance transparent thin-film transistor based on Y ₂ O ₃ /In ₂ O ₃ with low interface traps. <i>Applied Physics Letters</i> , 2010 , 97, 122108	3.4	24
13	Microstructure, optical, and electrical properties of p-type SnO thin films. <i>Applied Physics Letters</i> , 2010 , 96, 042113	3.4	122

12	Microstructural, optical, and electrical properties of SnO thin films prepared on quartz via a two-step method. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 1060-5	9.5	176
11	Phase and Optical Characterizations of Annealed SnO Thin Films and Their p-Type TFT Application. <i>Journal of the Electrochemical Society</i> , 2010 , 157, H598	3.9	102
10	Improvement of phase stability and accurate determination of optical constants of SnO thin films by using Al ₂ O ₃ capping layer. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 1565-8	9.5	31
9	Influence of the channel layer thickness on electrical properties of indium zinc oxide thin-film transistor. <i>Microelectronic Engineering</i> , 2010 , 87, 2019-2023	2.5	25
8	Enhancement of electrical performance in In ₂ O ₃ thin-film transistors by improving the densification and surface morphology of channel layers. <i>Solid-State Electronics</i> , 2010 , 54, 479-483	1.7	33
7	Anomalous photoluminescence of InAs quantum dots implanted by Mn ions. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007 , 36, 221-225	3	4
6	Growth of high density self-assembled InAs quantum dots on As-pressure-modulated InAlAs multilayer structures on InP(001) substrate. <i>Nanotechnology</i> , 2007 , 18, 215302	3.4	1
5	Evolution of the amount of InAs in wetting layers in an InAs/GaAs quantum-dot system studied by reflectance difference spectroscopy. <i>Nanotechnology</i> , 2006 , 17, 2207-2211	3.4	8
4	MBE InAs quantum dots grown on metamorphic InGaAs for long wavelength emitting. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006 , 35, 194-198	3	6
3	Preparation and AFM characterization of self-ordered porous alumina films on semi-insulated gas substrate. <i>Materials Science in Semiconductor Processing</i> , 2006 , 9, 337-340	4.3	2
2	Molecular beam epitaxy InAs dot arrays on InGaAs/GaAs. <i>Nanotechnology</i> , 2006 , 17, 5846-5850	3.4	1
1	Influence of AlGa _{0.5} N/GaN interface polarization fields on the properties of photoconductive detectors. <i>Journal of Applied Physics</i> , 2004 , 95, 5925-5927	2.5	9