Hongliang Zhang

List of Publications by Year
in descending order

58	1,587	304368	315357
papers	citations	22 h-index	38 g-index

58	58	58	1990
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrasensitive Memristive Synapses Based on Lightly Oxidized Sulfide Films. Advanced Materials, 2017, 29, 1606927.	11.1	158
2	High-temperature tolerance in WTi-Al 2 O 3 cermet-based solar selective absorbing coatings with low thermal emissivity. Nano Energy, 2017, 37, 232-241.	8.2	108
3	High-Performance Visible-Blind Ultraviolet Photodetector Based on IGZO TFT Coupled with pâ€“n Heterojunction. ACS Applied Materials & Interfaces, 2018, 10, 8102-8109.	4.0	106
4	Optoelectronic neuromorphic thin-film transistors capable of selective attention and with ultra-low power dissipation. Nano Energy, 2019, 62, 772-780.	8.2	103
5	Synaptic devices based on purely electronic memristors. Applied Physics Letters, 2016, 108, .	1.5	71
6	Semiconducting ZnSnN2 thin films for Si/ZnSnN2 p-n junctions. Applied Physics Letters, 2016, 108, .	1.5	59
7	Mechanism for resistive switching in chalcogenide-based electrochemical metallization memory cells. AIP Advances, 2015, 5, .	0.6	56
8	Nanogranular Al2O3 proton conducting films for low-voltage oxide-based homojunction thin-film transistors. Journal of Materials Chemistry C, 2013, 1, 2781.	2.7	54
9	Electrochromism of Nanocrystal-in-Glass Tungsten Oxide Thin Films under Various Conduction Cations. Inorganic Chemistry, 2019, 58, 2089-2098.	1.9	53
10	Determination of some basic physical parameters of SnO based on SnO/Si pn heterojunctions. Applied Physics Letters, 2015, 106, .	1.5	52
11	Determination of the basic optical parameters of ZnSnN_2. Optics Letters, 2015, 40, 1282.	1.7	51
12	Long-term-stable WO3-PB complementary electrochromic devices. Journal of Alloys and Compounds, 2021, 861, 158534.	2.8	50
13	Band Offset Engineering in ZnSnN₂-Based Heterojunction for Low-Cost Solar Cells. ACS Photonics, 2018, 5, 2094-2099.	3.2	46
14	Templateâ€Free Growth of Wellâ€Ordered Silver Nano Forest/Ceramic Metamaterial Films with Tunable Optical Responses. Advanced Materials, 2017, 29, 1605324.	11.1	42
15	Thin Film Solar Cell Based on ZnSnN₂/SnO Heterojunction. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700332.	1.2	38
16	Threshold Voltage Tuning in a-IGZO TFTs With Ultrathin SnO_xCapping Layer and Application to Depletion-Load Inverter. IEEE Electron Device Letters, 2016, 37, 422-425.	2.2	30
17	Silver Nanoparticles with an Armor Layer Embedded in the Alumina Matrix To Form Nanocermet Thin Films with Sound Thermal Stability. ACS Applied Materials & Interfaces, 2014, 6, 11550-11557.	4.0	29
18	Plasmonic AgAl Bimetallic Alloy Nanoparticle/Al₂O₃ Nanocermet Thin Films with Robust Thermal Stability for Solar Thermal Applications. Advanced Materials Interfaces, 2016, 3, 1600248.	1.9	29

#	Article	IF	Citations
19	Tungsten oxide proton conducting films for low-voltage transparent oxide-based thin-film transistors. Applied Physics Letters, 2013, 102, .	1.5	27
20	Direct Growth of Vertically Orientated Nanocavity Arrays for Plasmonic Color Generation. Advanced Functional Materials, 2020, 30, 2002287.	7.8	26
21	Flexible Electrochromic V₂O₅Thin Films with Ultrahigh Coloration Efficiency on Graphene Electrodes. Journal of the Electrochemical Society, 2018, 165, D183-D189.	1.3	25
22	Tunable crystallographic grain orientation and Raman fingerprints of polycrystalline SnO thin films. Journal of Materials Chemistry C, 2015, 3, 1077-1081.	2.7	24
23	Interfacial Charge Transfer and Zinc Ion Intercalation and Deintercalation Dynamics in Flexible Multicolor Electrochromic Energy Storage Devices. ACS Applied Energy Materials, 2022, 5, 88-97.	2.5	23
24	Proton conducting zeolite films for low-voltage oxide-based electric-double-layer thin-film transistors and logic gates. Journal of Materials Chemistry C, 2013, 1, 5669.	2.7	21
25	Anomalous rectification in a purely electronic memristor. Applied Physics Letters, 2016, 109, 143505.	1.5	21
26	Extended-gate-type IGZO electric-double-layer TFT immunosensor with high sensitivity and low operation voltage. Applied Physics Letters, 2016, 109, .	1.5	21
27	Aluminum-ion-intercalation nickel oxide thin films for high-performance electrochromic energy storage devices. Journal of Materials Chemistry C, 2021, 9, 17427-17436.	2.7	20
28	Single-crystalline metal filament-based resistive switching in a nitrogen-doped carbon film containing conical nanopores. Applied Physics Letters, 2015, 106, 083104.	1.5	19
29	Broadband Optoelectronic Synaptic Thinâ€Film Transistors Based on Oxide Semiconductors. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900630.	1.2	19
30	The electrical properties of n-ZnO/p-SnO heterojunction diodes. Applied Physics Letters, 2016, 109, 123507.	1.5	17
31	Effect of post-annealing on structural and electrochromic properties of Mo-doped V2O5 thin films. Journal of Sol-Gel Science and Technology, 2016, 77, 604-609.	1.1	17
32	Low-Voltage Junctionless Oxide-Based Thin-Film Transistors Self-Assembled by a Gradient Shadow Mask. IEEE Electron Device Letters, 2012, 33, 1720-1722.	2.2	14
33	Boosting charge-transfer kinetics and cyclic stability of complementary WO3â€“NiO electrochromic devices via SnOx interfacial layer. Journal of Science: Advanced Materials and Devices, 2021, 6, 494-500.	1.5	14
34	Alloyed nanoparticle-embedded alumina nanocermet film: A new attempt to improve the thermotolerance. Applied Surface Science, 2015, 331, 285-291.	3.1	13
35	Combined control of the cation and anion to make ZnSnON thin films for visible-light phototransistors with high responsivity. Journal of Materials Chemistry C, 2017, 5, 6480-6487.	2.7	12
36	In-Plane-Gate Oxide-Based Thin-Film Transistors Self-Aligned on Stacked Self-Assembled Monolayer/$hbox{SiO}_{2}$ Electrolyte Dielectrics. IEEE Electron Device Letters, 2012, 33, 531-533.	2.2	11

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37	In situ TEM investigation of hexagonal WO3 irreversible transformation to Li2WO4. Scripta Materialia, 2021, 203, 114090.	2.6	11
38	A Self-Bleaching Electrochromic Mirror Based on Metal Organic Frameworks. Materials, 2021, 14, 2771.	1.3	10
39	Transparent In-Plane-Gate Junctionless Oxide-Based TFTs Directly Written by Laser Scribing. IEEE Electron Device Letters, 2012, 33, 1723-1725.	2.2	8
40	(001) CeO2 films epitaxially grown on SrTiO3 (001) substrates by pulsed laser deposition using a metallic Ce target. Vacuum, 2013, 87, 81-83.	1.6	8
41	Understanding Electrochemical Intercalation of Al³⁺ Cation into the WO₃ Electrochromic Electrode from Solid Electrolyte Interphase and Mass Changes. ACS Applied Energy Materials, 2022, 5, 1833-1839.	2.5	8
42	Design, Properties, and TFT Application of Solutionâ€Processed Inâ€Gaâ€Cdâ€O Thin Films. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800034.	1.2	7
43	Structural and Electrochromic Properties of Undoped and Mo-Doped V₂O₅ Thin Films by a Two-Electrode Electrodeposition. Journal of Nanoscience and Nanotechnology, 2018, 18, 7502-7507.	0.9	7
44	Broadband hyperbolic metamaterial covering the whole visible-light region. Optics Letters, 2019, 44, 2970.	1.7	7
45	Proton conducting sodium-alginate-gated oxide thin-film transistors with varying device structure. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 3103-3109.	0.8	6
46	Specific phase modulation and infrared photon confinement in solar selective absorbers. Applied Materials Today, 2020, 18, 100533.	2.3	6
47	Realâ€Time Mass Change: An Intrinsic Indicator to Dynamically Probe the Electrochemical Degradation Evolution in WO₃. Advanced Materials Interfaces, 2022, 9, .	1.9	6
48	Surface Passivation Performance of Atomic-Layer-Deposited Al2O3 on p-type Silicon Substrates. Journal of Materials Science and Technology, 2014, 30, 835-838.	5.6	5
49	Aqueous solution-processed, self-flattening AlOx:Y dielectrics for fully-transparent thin-film transistors. Ceramics International, 2019, 45, 15883-15891.	2.3	5
50	Substrate-bias-aided preparation and properties of amorphous gallium oxide films and their deep-ultraviolet photodetectors. Ceramics International, 2021, 47, 32138-32143.	2.3	5
51	Controllable growth of nanocomposite films with metal nanocrystals sandwiched between dielectric superlattices. Journal of Nanoparticle Research, 2011, 13, 6447-6453.	0.8	4
52	Unraveling the Role of Water on the Electrochromic and Electrochemical Properties of Nickel Oxide Electrodes in Electrochromic Pseudocapacitors. Journal of the Electrochemical Society, 2021, 168, 113502.	1.3	3
53	Mechanistic insights into the dry prelithiated WO3 thin films in electrochromic devices. Solid State Ionics, 2021, 373, 115814.	1.3	1
54	Air Nanocolumn-SiO2 composite film with adjustable anisotropic refractive index. Materials Today Physics, 2022, 26, 100722.	2.9	1

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55	n-type Polycrystalline Si Thick Films Deposited on SiNx-coated Metallurgical Grade Si Substrates. Journal of Materials Science and Technology, 2015, 31, 65-69.	5.6	0
56	The same batch enabled threshold voltage tuning for verticallyâ€•or laterallyâ€gated transparent InZnO thinâ€ffilm transistors. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600918.	0.8	0
57	Microstructural and optical characterization of polymer nanotemplates with different morphologies. Vacuum, 2021, 193, 110512.	1.6	0
58	Latent Fingerprint Visualization and Subsequent DNA Extraction Using Electron Beam Evaporation of Metallic Ultra-Thin Films. Current Nanoscience, 2019, 15, 248-253.	0.7	0