Highly conductive and transparent ZnO thin films prep

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Citation Report

#	Article	IF	Citations
1	Control of Crystal Growth of ZnO Nanowhiskers in Aqueous Solution and Synthesis of Transparent Nanoarrays. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2007, 54, 834-838.	0.1	2
2	Low-Temperature Fabrication of Semi-Circular Shaped ZnO Nanowhiskers Using an Aqueous Solution. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2007, 54, 849-853.	0.1	0
3	Semi-circular shaped ZnO nanowhiskers assemblies deposited using an aqueous solution. Applied Surface Science, 2008, 255, 2329-2332.	3.1	10
4	Growth and characterisation of electrodeposited ZnO thin films. Thin Solid Films, 2008, 516, 3893-3898.	0.8	133
5	Structural and optical properties of electrodeposited ZnO thin films. Thin Solid Films, 2008, 517, 617-621.	0.8	24
6	In situ forced hydrolysis-assisted fabrication and photo-induced electrical property in sensor of ZnO nanoarrays. Journal of Colloid and Interface Science, 2008, 325, 459-463.	5.0	21
7	Al-doped ZnO thin films as methanol sensors. Sensors and Actuators B: Chemical, 2008, 134, 654-659.	4.0	357
8	ZnO films fabricated by chemical bath deposition from zinc nitrate and ammonium citrate tribasic solution. Thin Solid Films, 2008, 516, 7318-7322.	0.8	24
9	Highly conductive Al-doped tetra-needle-like ZnO whiskers prepared by a solid state method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 150, 203-207.	1.7	15
10	Gas sensing properties and complex impedance analysis of La2O3-added WO3 nanoparticles to VOC gases. Materials Chemistry and Physics, 2008, 109, 541-546.	2.0	23
11	Thermal annealing effect on optical properties of electrodeposited ZnO thin films. Journal Physics D: Applied Physics, 2008, 41, 195410.	1.3	36
12	The effects of zinc nitrate, zinc acetate and zinc chloride precursors on investigation of structural and optical properties of ZnO thin films. Journal of Alloys and Compounds, 2008, 466, 447-450.	2.8	178
13	Efficient, One-Step Mechanochemical Process for the Synthesis of ZnO Nanoparticles. Industrial & Engineering Chemistry Research, 2008, 47, 1095-1101.	1.8	54
14	Micropatterning of ZnO Nanoarrays by Forced Hydrolysis of Anhydrous Zinc Acetate. Langmuir, 2008, 24, 7614-7617.	1.6	49
15	Synthesis of Well-Aligned ZnO Nanowhisker Films Using Aqueous Solution for Use in Dye-Sensitized Sensor. Key Engineering Materials, 2008, 388, 27-30.	0.4	0
16	Effect of Aluminum Nitrate Concentration in Zinc Acetate Precursor on ZnO:Al Thin Films Prepared by Spray Pyrolysis. Materials Research Society Symposia Proceedings, 2009, 1201, 130.	0.1	0
17	Effect of annealing temperature on the tribological behavior of ZnO films prepared by solâ€“gel method. Thin Solid Films, 2009, 517, 1690-1700.	0.8	41
18	Control of crystal growth for ZnO nanowhisker films in aqueous solution. Thin Solid Films, 2009, 518, 906-910.	0.8	11

#	Article	IF	Citations
19	Structural characterization of Zn1â^'xCdxO (0â‰¤xâ‰¤0.20) microrods grown by spray pyrolysis. Materials Science in Semiconductor Processing, 2009, 12, 118-121.	1.9	6
20	Effects of polyethylenimine on morphology and property of ZnO films grown in aqueous solutions. Applied Surface Science, 2009, 255, 6823-6826.	3.1	13
21	Effects of annealing temperature on the structural and optical properties of ZnO hexagonal pyramids. Journal of Alloys and Compounds, 2009, 478, 367-370.	2.8	36
22	Transparent and conducting ZnO films grown by spray pyrolysis. Semiconductor Science and Technology, 2009, 24, 035006.	1.0	26
23	Influence of the Precursors and Chemical Composition of the Solution on the Properties of ZnO Thin Films Grown by Spray Pyrolysis. Journal of Physical Chemistry C, 2009, 113, 21074-21081.	1.5	64
24	Transparent, conducting, and ferromagnetic multilayer films based on ZnO/Fe3O4 by pulsed laser deposition technique. Materials Letters, 2010, 64, 1487-1489.	1.3	8
26	Semiconductor Gas Sensors: Dry Synthesis and Application. Angewandte Chemie - International Edition, 2010, 49, 7632-7659.	7.2	474
27	The effect of aminoalcohols (MEA, DEA and TEA) on morphological control of nanocrystalline ZnO powders and its optical properties. Journal of Physics and Chemistry of Solids, 2010, 71, 730-734.	1.9	38
28	Enhancement of electrical conductivity in sprayed ZnO thin film through zero-energyprocess. Physica B: Condensed Matter, 2010, 405, 4957-4960.	1.3	6
29	Effect of precursor medium on structural, electrical and optical properties of sprayed polycrystalline ZnO thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 175, 29-35.	1.7	35
30	Structural and optical characteristics of spin-coated ZnO thin films. Applied Surface Science, 2010, 256, 2405-2408.	3.1	79
31	Compositional and physico-optical characterization of 0â€“5% Al-doped zinc oxide films prepared by chemical spray pyrolysis. Journal Physics D: Applied Physics, 2010, 43, 095303.	1.3	16
32	Structural and electrical characterization of ZnO-based homojunctions. Journal of Alloys and Compounds, 2010, 496, 560-565.	2.8	10
33	Microstructure dependent ammonia sensing properties of nanostuctured zinc oxide thin films using in-house designed gas exposure facility. , 2011, , .		5
34	Growth and photocatalytic activity of ZnO nanosheets stabilized by Ag nanoparticles. Journal of Alloys and Compounds, 2011, 509, 4972-4977.	2.8	56
35	Growth, structure and optical characterization of Alâ€doped ZnO nanoparticle thin films. Crystal Research and Technology, 2011, 46, 1086-1092.	0.6	28
36	Effects of ITO precursor thickness on transparent conductive Al doped ZnO film for solar cell applications. Solar Energy Materials and Solar Cells, 2011, 95, 138-141.	3.0	57
37	Fabrication of p-type CuSCN/n-type micro-structured ZnO heterojunction structures. Thin Solid Films, 2011, 519, 3679-3685.	0.8	21

#	Article	IF	Citations
38	Improved Optical Transmittance of Boron Doped ZnO Thin Films by Low Pressure Chemical Vapor Deposition with Pulse Boron Doping. Journal of the Electrochemical Society, 2011, 158, H482.	1.3	5
39	Structural and optical properties of transparent polycrystalline ZnO films. , 2012, , .		2
40	One-Dimensional ZnO Nanostructures by Wet-Chemistry Technique for Dye Sensitized Solar Cell Application. Advanced Materials Research, 0, 576, 406-412.	0.3	0
41	Growth of electrodeposited ZnO nanowires. , 2012, , .		2
42	Effect of precursors on structure, optical and electrical properties of chemically deposited nanocrystalline ZnO thin films. Applied Surface Science, 2012, 258, 2823-2828.	3.1	31
43	Liquid-Phase Preparation and Characterization of Zinc Oxide Nanoparticles. Particulate Science and Technology, 2012, 30, 32-42.	1.1	3
44	Annealing effects on electrical and optical properties of ZnO thin films synthesized by the electrochemical method. Current Applied Physics, 2012, 12, 784-788.	1.1	15
45	Structural, morphological, electrical and vapour sensing properties of Mn doped nanostructured ZnO thin films. Sensors and Actuators B: Chemical, 2012, 166-167, 624-631.	4.0	78
46	Structural and optical properties of ZnO and Al-doped ZnO microrods obtained by spray pyrolysis method using different solvents. Superlattices and Microstructures, 2012, 51, 372-380.	1.4	36
47	Effects of post-deposition heat treatment on the microstructure and properties of Al-doped ZnO thin films prepared by aqueous phase deposition. Thin Solid Films, 2012, 520, 2846-2854.	0.8	11
48	Synthesis of undoped and Al doped ZnO nanostructures: Molar ratio dependency and structural properties. , 2013, , .		0
49	An influence of deposition temperature on structural, optical and electrical properties of sprayed ZnO thin films of identical thickness. Current Applied Physics, 2013, 13, 2109-2116.	1.1	16
50	Influence of In doping on the structural, optical and acetone sensing properties of ZnO nanoparticulate thin films. Materials Science in Semiconductor Processing, 2013, 16, 200-210.	1.9	55
51	Self-assembled monolayers assisted thin film growth of aluminum doped zinc oxide by spray pyrolysis method. Applied Surface Science, 2013, 270, 648-654.	3.1	11
52	Influence of annealing on the structural, optical and photoluminescence properties of ZnO thin films for enhanced H2 sensing application. Ceramics International, 2013, 39, 4749-4756.	2.3	51
53	Effect of the electrochemical technique on nanocrystalline ZnO electrodeposition, its structural, morphological and photoelectrochemical properties. Thin Solid Films, 2013, 537, 119-123.	0.8	32
54	A Novel Al-Y Codoped ZnO Thin Film as Anode for Organic Light Emitting Diode. Integrated Ferroelectrics, 2013, 143, 17-23.	0.3	2
55	Effect of ammonia solution on properties of sprayed ZnO thin films consisting of nano-pyramids. Metals and Materials International, 2013, 19, 983-990.	1.8	4

#	Article	IF	Citations
56	Al and F codoped ZnO by a novel co-spray deposition technique for solar cells applications. , 2013, , .		2
57	Investigation on the Structural and Optical Properties of ZnO Thin Films Prepared by Sol-Gel Method. Advanced Materials Research, 0, 971-973, 89-92.	0.3	1
58	Characteristics of YAG-doped ZnO/ITO deposited by spraying methed. , 2014, , .		0
59	Role of substrate temperature on the properties of Na-doped ZnO thin film nanorods and performance of ammonia gas sensors using nebulizer spray pyrolysis technique. Journal of Alloys and Compounds, 2014, 582, 387-391.	2.8	49
60	High quality ZnO/CuO nanocomposites synthesized by microwave assisted reaction. Journal of Materials Science: Materials in Electronics, 2014, 25, 832-836.	1.1	19
61	Influence of preparation parameters on structure and optical properties of ZnO thin films. Indian Journal of Physics, 2014, 88, 585-591.	0.9	3
62	Mechanical-assisted preparation and photocatalytic properties of almost-visible light-driven ZnO/ZnFe₂O₄ nanocomposites. Materials Research Society Symposia Proceedings, 2014, 1641, 1.	0.1	3
63	Influence of precursor type, deposition time and doping concentration on the morphological, electrical and optical properties of ZnO and ZnO:Al thin films grown by ultrasonic spray pyrolysis. Thin Solid Films, 2014, 555, 62-67.	0.8	33
64	Intermittent spray pyrolytic growth of nanocrystalline and highly oriented transparent conducting ZnO thin films: Effect of solution spray rate. Journal of Alloys and Compounds, 2014, 584, 128-135.	2.8	22
65	Hydrophilic Cu2O nanostructured thin films prepared by facile spin coating method: Investigation of surface energy and roughness. Materials Chemistry and Physics, 2014, 147, 1204-1209.	2.0	50
66	Structural, optical and electrical characterization of nebulizer-sprayed ZnO nano-rods. Superlattices and Microstructures, 2014, 65, 184-194.	1.4	34
67	High Performance Indium-Doped ZnO Gas Sensor. Journal of Nanomaterials, 2015, 2015, 1-6.	1.5	54
68	Surfactant mediated one- and two-dimensional ZnO nanostructured thin films for dye sensitized solar cell application. Materials Research Express, 2015, 2, 015502.	0.8	15
69	Stacked ZnO nanorods synthesized by solution precipitation method and their photocatalytic activity study. Journal of Sol-Gel Science and Technology, 2015, 74, 260-271.	1.1	48
70	Enhanced photocatalytic activity of ZnO nanorods grown on Ga doped seed layer. Superlattices and Microstructures, 2015, 83, 422-430.	1.4	28
71	Effect of synthesis medium on aggregation tendencies of ZnO nanosheets and their superior photocatalytic performance. Journal of Materials Science, 2015, 50, 819-832.	1.7	12
72	Synthesis of structural and optical characterization of surfactant capped ZnO nanocrystalline. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 155-161.	2.0	20
73	Effect of aspect ratio and surface defects on the photocatalytic activity of ZnO nanorods. Scientific Reports, 2014, 4, 4596.	1.6	761

#	Article	IF	Citations
74	Thermal, structural and optical investigation of Cu-doped ZnOÂnanoparticles. Modern Physics Letters B, 2016, 30, 1650406.	1.0	19
75	Probing the doping mechanisms and electrical properties of Al, Ga and In doped ZnO prepared by spray pyrolysis. Journal of Materials Chemistry C, 2016, 4, 5953-5961.	2.7	14
76	Highly sensitive H2O2 sensor based on annealed MnO2/Al2O3 nanofibers prepared by a novel spray pyrolysis deposition. Journal of Analytical and Applied Pyrolysis, 2017, 128, 268-274.	2.6	8
77	Natural rubber/tetra-needle-like zinc oxide whisker composites: their preparation and characterization. Journal of Polymer Engineering, 2018, 38, 25-32.	0.6	5
78	Transparent conducting Al:ZnO thin films on large area by efficient cylindrical rotating DC magnetron sputtering. Journal of Alloys and Compounds, 2018, 763, 504-511.	2.8	29
79	Fabrication of Polyaniline on Silane-Functionalized Zinc Oxide. Key Engineering Materials, 0, 775, 94-98.	0.4	2
80	Role of defect states in the luminescence properties of ZnO. AIP Conference Proceedings, 2019, , .	0.3	1
81	Synthesis and characterization of Al-doped ZnO terrace-truncated nanocone structure by the advanced spray pyrolysis deposition technique. Japanese Journal of Applied Physics, 2019, 58, 080904.	0.8	2
82	Effect of Ethanol on the Photovoltaic Performance of ZnO Based Dye Sensitized Solar Cells. Crystallography Reports, 2019, 64, 1159-1164.	0.1	1
83	Study on electrical behaviour of polyaniline doped with various weight percentage of ZnO. Journal of Physics: Conference Series, 2020, 1644, 012043.	0.3	0
84	Spray deposited nanostructured ZnO:Mn thin films for ammonia vapour sensing application. Materials Today: Proceedings, 2021, 38, 2839-2844.	0.9	0
85	Grown and Characterization of ZnO Aligned Nanorod Arrays for Sensor Applications. Energies, 2021, 14, 3750.	1.6	5
86	Influence of Different Post-treatments on the Physical Properties of Sprayed Zinc Oxide Thin Films. Springer Proceedings in Physics, 2009, , 177-183.	0.1	1
87	Ta Doped SnO2 Transparent Conducting Films Prepared by PLD. Korean Journal of Materials Research, 2013, 23, 435~440-435~440.	0.1	6
88	Influence of Growth Conditions on the Morphology of Zinc Oxide Nanoarrays. Transactions of the Materials Research Society of Japan, 2008, 33, 709-712.	0.2	1
89	Effect of Annealing on Gas Sensing Performance of Nanostructured Zno Thick Film Resistors. International Journal on Smart Sensing and Intelligent Systems, 2012, 5, 277-294.	0.4	16
90	ZnO thin films by spray pyrolysis and its doping with Sb. QuÃmica Hoy Chemistry Sciences $b, 2012, 2, 4.	0.1	0
91	Electrical Properties of Thermal Annealed in Vacuum Spray Deposited Al-Doped ZnO Thin Films. IFMBE Proceedings, 2020, , 83-87.	0.2	0

#	Article	IF	Citations
92	Gas sensors and factors influencing sensing mechanism with a special focus on MOS sensors. Journal of Materials Science, 2023, 58, 559-582.	1.7	17
93	Broad perspective of environmental remediation technology and their recent advances through size-and shape-dependent properties of metal oxides. , 2023, , 1-34.		0