Lee Chow

List of Publications by Year
in descending order

119 papers	6,006 citations	101384 36 h-index	71532 76 g-index
120 all docs	120 docs citations	120 times ranked	6531 citing authors

#	Article	IF	Citations
1	Selective hydrogen gas nanosensor using individual ZnO nanowire with fast response at room temperature. Sensors and Actuators B: Chemical, 2010, 144, 56-66.	4.0	418
2	Effects of annealing on properties of ZnO thin films prepared by electrochemical deposition in chloride medium. Applied Surface Science, 2010, 256, 1895-1907.	3.1	418
3	Effect of synthesis conditions on the growth of ZnO nanorods via hydrothermal method. Physica B: Condensed Matter, 2008, 403, 3713-3717.	1.3	370
4	Novel hydrogen gas sensor based on single ZnO nanorod. Microelectronic Engineering, 2008, 85, 2220-2225.	1.1	320
5	Well-aligned arrays of vertically oriented ZnO nanowires electrodeposited on ITO-coated glass and their integration in dye sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 211, 65-73.	2.0	250
6	Synthesis and characterization of ZnO nanowires for nanosensor applications. Materials Research Bulletin, 2010, 45, 1026-1032.	2.7	227
7	Synthesis and Characterization of Ag- or Sb-Doped ZnO Nanorods by a Facile Hydrothermal Route. Journal of Physical Chemistry C, 2010, 114, 12401-12408.	1.5	227
8	Synthesis and characterization of Cu-doped ZnO one-dimensional structures for miniaturized sensor applications with faster response. Sensors and Actuators A: Physical, 2013, 189, 399-408.	2.0	227
9	A single ZnO tetrapod-based sensor. Sensors and Actuators B: Chemical, 2009, 141, 511-517.	4.0	195
10	Characterization of CdS thin films grown by chemical bath deposition using four different cadmium sources. Thin Solid Films, 2008, 516, 7306-7312.	0.8	180
11	Nanofabrication and characterization of ZnO nanorod arrays and branched microrods by aqueous solution route and rapid thermal processing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 145, 57-66.	1.7	178
12	Silver-doped zinc oxide single nanowire multifunctional nanosensor with a significant enhancement in response. Sensors and Actuators B: Chemical, 2016, 223, 893-903.	4.0	170
13	Highly sensitive and selective hydrogen single-nanowire nanosensor. Sensors and Actuators B: Chemical, 2012, 173, 772-780.	4.0	149
14	Metal/CdTe/CdS/Cd1â^'xZnxS/TCO/glass: A new CdTe thin film solar cell structure. Solar Energy Materials and Solar Cells, 2000, 61, 203-211.	3.0	145
15	Fabrication of ZnO nanorod-based hydrogen gas nanosensor. Microelectronics Journal, 2007, 38, 1211-1216.	1.1	143
16	Crossed zinc oxide nanorods for ultraviolet radiation detection. Sensors and Actuators A: Physical, 2009, 150, 184-187.	2.0	136
17	Characterization of gallium-doped CdS thin films grown by chemical bath deposition. Applied Surface Science, 2009, 255, 4129-4134.	3.1	134
18	Data reduction methodology for perturbed angular correlation experiments. Hyperfine Interactions, 1980, 8, 191-213.	0.2	127

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19	Highly sensitive palladium oxide thin film extended gate FETs as pH sensor. Sensors and Actuators B: Chemical, 2014, 205, 199-205.	4.0	122
20	Synthesis and processing of CdS/ZnS multilayer films for solar cell application. Thin Solid Films, 2005, 474, 77-83.	0.8	118
21	Nanostructured zinc oxide gas sensors by successive ionic layer adsorption and reaction method and rapid photothermal processing. Thin Solid Films, 2008, 516, 3338-3345.	0.8	116
22	Optimization of Chemical Bath Deposited Cadmium Sulfide Thin Films. Journal of the Electrochemical Society, 1997, 144, 2342-2346.	1.3	93
23	Optimization of chemical bath deposited CdS thin films using nitrilotriacetic acid as a complexing agent. Thin Solid Films, 2008, 516, 5967-5973.	0.8	92
24	Investigation of chemical bath deposition of CdO thin films using three different complexing agents. Applied Surface Science, 2011, 257, 9237-9242.	3.1	91
25	Investigation of aluminium and indiumin situdoping of chemical bath deposited CdS thin films. Journal Physics D: Applied Physics, 2008, 41, 185304.	1.3	89
26	Focusedâ€ionâ€beam fabrication of ZnO nanorodâ€based UV photodetector using the inâ€situ liftâ€out technique. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2673-2678.	0.8	85
27	Investigation of chemical bath deposition of ZnO thin films using six different complexing agents. Journal Physics D: Applied Physics, 2009, 42, 135304.	1.3	73
28	Functionalized individual ZnO microwire for natural gas detection. Sensors and Actuators A: Physical, 2012, 176, 64-71.	2.0	73
29	Raman Spectroscopy Analysis for Optical Diagnosis of Oral Cancer Detection. Journal of Clinical Medicine, 2019, 8, 1313.	1.0	65
30	Integration of individual TiO₂ nanotube on the chip: Nanodevice for hydrogen sensing. Physica Status Solidi - Rapid Research Letters, 2015, 9, 171-174.	1.2	56
31	Particle Size Effects of TiO₂Layers on the Solar Efficiency of Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2013, 2013, 1-9.	1.4	52
32	Chemical bath deposition of SnO2 and Cd2SnO4 thin films. Applied Surface Science, 2012, 258, 6069-6074.	3.1	47
33	Dynamical critical behavior of isotropic ferromagnets. Physical Review B, 1982, 26, 5056-5073.	1.1	45
34	Improving Efficiency of Multicrystalline Silicon and CIGS Solar Cells by Incorporating Metal Nanoparticles. Materials, 2015, 8, 6761-6771.	1.3	40
35	TiO₂/Cu₂O/CuO Multi-Nanolayers as Sensors for H₂ and Volatile Organic Compounds: An Experimental and Theoretical Investigation. ACS Applied Materials & Interfaces, 2021, 13, 32363-32380.	4.0	39
36	Synthesis of carbon nanotubes by electrochemical deposition at room temperature. Carbon, 2006, 44, 1013-1016.	5.4	37

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37	GaN Thin Film Based Light Addressable Potentiometric Sensor for pH Sensing Application. Applied Physics Express, 2013, 6, 036601.	1.1	36
38	Single CuO/Cu‹sub›2‹/sub›O/Cu Microwire Covered by a Nanowire Network as a Gas Sensor for the Detection of Battery Hazards. ACS Applied Materials & Interfaces, 2020, 12, 42248-42263.	4.0	36
39	Functionalized Pd/ZnO Nanowires for Nanosensors. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700321.	1.2	33
40	Inâ€situ boron doping of chemicalâ€bath deposited CdS thin films. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 256-262.	0.8	32
41	FIB fabrication of ZnO nanotetrapod and cross-sensor. Physica Status Solidi (B): Basic Research, 2010, 247, 1628-1632.	0.7	31
42	Electron emission from the side wall of an individual multiwall carbon nanotube. Carbon, 2007, 45, 281-284.	5.4	29
43	Fullerene formation during production of chemical vapor deposited diamond. Applied Physics Letters, 1995, 66, 430-432.	1.5	28
44	Complex structure of carbon nanotubes and their implications for formation mechanism. Journal of Applied Physics, 2003, 93, 9972-9976.	1.1	28
45	Trapping and Fock state generation in a two-photon micromaser. Journal of Modern Optics, 1998, 45, 2519-2532.	0.6	26
46	Focused-ion-beam assisted fabrication of individual multiwall carbon nanotube field emitter. Carbon, 2005, 43, 2083-2087.	5.4	24
47	Measurement and calculation of the pressure dependence of the MÃ¶ssbauer isomer shift of metallicSn119for the pressure range0â‰Pâ‰310kbar. Physical Review B, 1986, 33, 3039-3049.	1.1	22
48	Synthesis, characterization and performance of Cd1âˆ’xInxTe compound for solar cell applications. Journal of Alloys and Compounds, 2013, 563, 39-43.	2.8	22
49	Critical field patterns in optical Fibonacci multilayers. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 2231.	0.8	21
50	Observation of Crossover in the Dynamic Exponentzin Fe and Ni. Physical Review Letters, 1980, 45, 908-911.	2.9	19
51	Multiclass classification of autofluorescence images of oral cavity lesions based on quantitative analysis. PLoS ONE, 2020, 15, e0228132.	1.1	19
52	Alâ€Doped ZnO Nanowires by Electrochemical Deposition for Selective VOC Nanosensor and Nanophotodetector. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700824.	0.8	17
53	Growth of (100) oriented diamond thin films on ball structure diamond-like particles. Journal of Materials Research, 1992, 7, 1606-1609.	1.2	14
54	Comparison of Thermal Annealing ‹i›versus‹/i› Hydrothermal Treatment Effects on the Detection Performances of ZnO Nanowires. ACS Applied Materials & Interfaces, 2021, 13, 10537-10552.	4.0	14

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55	Diamond nucleation on graphite substrate using a pure hydrogen feed. Solid State Communications, 1995, 93, 999-1002.	0.9	13
56	Original Methods for Diffusion Measurements in Polycrystalline Thin Films. Defect and Diffusion Forum, 0, 322, 129-150.	0.4	12
57	Characterization of liposomes and silica nanoparticles using resistive pulse method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 448, 9-15.	2.3	12
58	Dye-Sensitized Solar Cells with Anatase TiO₂Nanorods Prepared by Hydrothermal Method. International Journal of Photoenergy, 2013, 2013, 1-8.	1.4	10
59	Phosphor-Free InGaN White Light Emitting Diodes Using Flip-Chip Technology. Materials, 2017, 10, 432.	1.3	9
60	Novel Quantitative Analysis Using Optical Imaging (VELscope) and Spectroscopy (Raman) Techniques for Oral Cancer Detection. Cancers, 2020, 12, 3364.	1.7	9
61	Fullerenes and Polymers Produced by the Chemical Vapor Deposition Method. ACS Symposium Series, 1997, , 51-60.	0.5	8
62	Redistribution of Implanted Species in Polycrystalline Silicon Films on Silicon Substrate. Defect and Diffusion Forum, 2007, 264, 7-12.	0.4	7
63	Understanding of nuclear quadrupole interactions of 35 Cl, 79 Br and 129 I and binding energies of solid halogens at first-principles level. Hyperfine Interactions, 2007, 176, 51-57.	0.2	7
64	Light-Immune pH Sensor with SiC-Based Electrolyteâ€“Insulatorâ€“Semiconductor Structure. Applied Physics Express, 2013, 6, 127002.	1.1	7
65	Synthesis and gas sensor applications of nanostructured ZnO grown at low temperatures. Turkish Journal of Physics, 2014, 38, 399-419.	0.5	7
66	Nanoporous Ge thin film production combining Ge sputtering and dopant implantation. Beilstein Journal of Nanotechnology, 2015, 6, 336-342.	1.5	7
67	Mï¿½ssbauer energy shift near the Curie temperature of Fe. Hyperfine Interactions, 1978, 4, 485-489.	0.2	6
68	Diffusion and Redistribution of Boron in Nickel Silicides. Defect and Diffusion Forum, 0, 323-325, 415-420.	0.4	6
69	BiSrCaCuO superconducting thin films on LaGaO3 and SrTiO3 by rf sputtering. Solid State Communications, 1990, 74, 1095-1098.	0.9	5
70	Study on Crowded Two-Dimensional Airspace - Self-Organized Criticality. Journal of Aircraft, 1998, 35, 301-306.	1.7	5
71	Numerical Simulation Support for Diffusion Coefficient Measurements in Polycrystalline Thin Films. Defect and Diffusion Forum, 0, 309-310, 63-72.	0.4	5
72	Improvement of Surge Protection by Using an AlGaN/GaN-Based Metalâ€“Semiconductorâ€“Metal Two-Dimensional Electron Gas Varactor. Japanese Journal of Applied Physics, 2012, 51, 124201.	0.8	5

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73	Pressure dependence of the hyperfine field of a Cd probe in a relaxed trivacancy complex in Ni. Physical Review B, 1992, 45, 4672-4675.	1.1	4
74	Nuclear quadrupole interactions and electronic structure of BF3â€‰â^™H2O complex. Hyperfine Interactions, 2007, 176, 45-50.	0.2	4
75	Neutron Transmutation Doping and Radiation Hardness for Solution-Grown Bulk and Nano-Structured ZnO. Materials Research Society Symposia Proceedings, 2008, 1108, 1.	0.1	4
76	Dopant diffusivity and solubility in nickel silicides. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 670-673.	0.8	4
77	Improvement of Surge Protection by Using an AlGaN/GaN-Based Metalâ€“Semiconductorâ€“Metal Two-Dimensional Electron Gas Varactor. Japanese Journal of Applied Physics, 2012, 51, 124201.	0.8	4
78	Calculation of the volume dependence of the electron density at the nucleus for the elements Li through Am. Relationship of this volume dependence to the hyperfine field for the elements dissolved in a ferromagnetic host. Physical Review B, 1983, 27, 6037-6051.	1.1	3
79	New Silicon-Based Materials for Spintronics Applications - Si:V and Si:Cr. ECS Transactions, 2006, 3, 481-489.	0.3	3
80	Properties of Si:Cr Annealed under Enhanced Stress Conditions. Solid State Phenomena, 2007, 131-133, 375-380.	0.3	3
81	Theory of electronic structure and nuclear quadrupole interactions in the BF3â€“NH3 complex and methyl derivatives. Hyperfine Interactions, 2007, 176, 39-44.	0.2	3
82	Controlling the properties of electrodeposited ZnO nanowire arrays for light emitting diode, photodetector and gas sensor applications. Proceedings of SPIE, 2014, , .	0.8	3
83	Atomic Transport in Nano-Đ¡rystalline Thin Films. Defect and Diffusion Forum, 2016, 367, 140-148.	0.4	3
84	Berezinskiiâ€“Kosterlitzâ€“Thouless transition in an Al superconducting nanofilm grown on GaAs by molecular beam epitaxy. Nanotechnology, 2020, 31, 205002.	1.3	3
85	Crossover of the spectral weight function: A new interpretation of some neutron scattering data. Physical Review B, 1988, 37, 5848-5851.	1.1	2
86	Temperature anomaly of the Cd hyperfine field in a trivacancy complex in Ni. Hyperfine Interactions, 1993, 78, 563-566.	0.2	2
87	Investigation of the hyperfine properties of deoxy hemoglobin based on its electronic structure obtained by Hartree-Fock-Roothan procedure. Hyperfine Interactions, 2008, 181, 75-80.	0.2	2
88	Synthesis and Characterization of Nanostructured Materials Prepared from SiO₂and GeO₂ Mixture by Carbon Assisted Method. Advanced Materials Research, 2008, 55-57, 637-640.	0.3	2
89	A HIGH ATTENUATION ELECTROMAGNETIC PULSE PROTECTOR WITH GDT, MOV AND PARALLEL COUPLED BPF ON HIGH THERMAL CONDUCTIVITY SUBSTRATES. Progress in Electromagnetics Research Letters, 2012, 33, 73-81.	0.4	2
90	Anomalous Decrease of Off-State Drain Leakage Current in GaN/AlGaN HEMTs With Dual Optical Excitation. IEEE Electron Device Letters, 2014, 35, 820-822.	2.2	2

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91	RGB-Stack Light Emitting Diode Modules with Transparent Glass Circuit Board and Oil Encapsulation. Materials, 2018, 11, 365.	1.3	2
92	Coupling Secondary Ion Mass Spectrometry and Atom Probe Tomography for Atomic Diffusion and Segregation Measurements. Microscopy and Microanalysis, 2019, 25, 517-523.	0.2	2
93	Deep Etched Gallium Nitride Waveguide for Raman Spectroscopic Applications. Crystals, 2019, 9, 176.	1.0	2
94	Hyperfine field distributions in nickel alloys measured by time differential perturbed angular correlations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 78, 201-204.	0.9	1
95	An interferometric velocity calibrator for73Ge MÃ¶ssbauer spectrometer. Hyperfine Interactions, 1987, 35, 1049-1052.	0.2	1
96	MÃ¶ssbauer spectroscopy of ferromagnetic oxygen-rich dicalcium cuprate Ca2CuO3+Î´. , 1999, 120/121, 507-512.		1
97	First principles study of nuclear quadrupole interactions in the molecular solid BF3 and the nature of binding between the molecules. Hyperfine Interactions, 2007, 176, 15-20.	0.2	1
98	Theoretical investigation of nuclear quadrupole interactions in DNA at first-principles level. Hyperfine Interactions, 2008, 181, 81.	0.2	1
99	First-principles cluster study of electronic structures, locations and hyperfine interactions of isolated atoms and ions in silicon. Hyperfine Interactions, 2010, 197, 37-41.	0.2	1
100	Reuse of the Reflective Light and the Recycle Heat Energy in Concentrated Photovoltaic System. International Journal of Photoenergy, 2013, 2013, 1-6.	1.4	1
101	Topological Transition in a 3â€‰nm Thick Al Film Grown by Molecular Beam Epitaxy. Journal of Nanomaterials, 2019, 2019, 1-6.	1.5	1
102	Theoretical investigation of nuclear quadrupole interactions in DNA at first-principles level. , 2008, , 601-606.		1
103	Crossover of the spectral weight function: A new interpretation of some largeqneutron scattering data (abstract). Journal of Applied Physics, 1988, 63, 3098-3098.	1.1	0
104	Response of the high temperature superconductors to weak AC magnetic field. Physica C: Superconductivity and Its Applications, 1991, 175, 634-638.	0.6	0
105	FRACTAL DIMENSION ANALYSIS OF YBaCuO THIN FILM CLUSTERS. Modern Physics Letters B, 1993, 07, 1209-1214.	1.0	0
106	Cinema as Physics Lesson. Physics Today, 2003, 56, 15-15.	0.3	0
107	Focused Ion Beam Fabrication of Individual Carbon Nanotube Devices. Materials Research Society Symposia Proceedings, 2007, 1020, 1.	0.1	0
108	Diffusion of Implanted Metals in Tantalum Silicide. Defect and Diffusion Forum, 2007, 264, 151-154.	0.4	0

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109	First-principles study of location of Er3â€‰+â€‰ionâ€”relationship to understanding of hyperfine interactions in the optoelectronic erbiumâ€“silicon system. Hyperfine Interactions, 2007, 178, 51-56.	0.2	0
110	Diffusion profiles and magnetic properties of Mn-implanted silicon after thermal annealing. Journal of Materials Science: Materials in Electronics, 2008, 19, 263-268.	1.1	0
111	Investigation of Nanomaterials Prepared by Thermal Evaporation of Carbon-ZnO Mixtures. Advanced Materials Research, 0, 55-57, 633-636.	0.3	0
112	Inside Back Cover (Phys. Status Solidi B 7/2010). Physica Status Solidi (B): Basic Research, 2010, 247, n/a-n/a.	0.7	0
113	Nanometric-Size Effect upon Diffusion and Reaction in Semiconductors: Experimental and Theoretical Investigations. Defect and Diffusion Forum, 0, 323-325, 433-438.	0.4	0
114	Copper doped zinc oxide micro- and nanostructures for room-temperature sensorial applications. , 2013, , .		0
115	Rapid synthesis and characterization of micro and nanostructures of molybdenum trioxide. , 2013, , .		0
116	Formation of germanium oxide microcrystals on the surface of Te-implanted Ge. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 252-255.	0.6	0
117	Evanescent Raman Spectroscopy of Bio-assemblies with Gallium Nitride Waveguide Structures. Biophysical Journal, 2018, 114, 685a.	0.2	0
118	ZnO Hydrogen Nanoscale Sensors. Lecture Notes in Nanoscale Science and Technology, 2013, , 119-152.	0.4	0
119	Au-NPs/ZnO Single Nanowire Nanosensors for Health Care Applications. , 2020, , .		0