Li-Chia Tien

List of Publications by Year
in descending order

57 papers	3,501 citations	218677 26 h-index	175258 52 g-index
57 all docs	57 docs citations	57 times ranked	4275 citing authors

#	Article	IF	Citations
1	ZnO nanowire growth and devices. Materials Science and Engineering Reports, 2004, 47, 1-47.	31.8	534
2	Hydrogen-selective sensing at room temperature with ZnO nanorods. Applied Physics Letters, 2005, 86, 243503.	3.3	524
3	Hydrogen sensing at room temperature with Pt-coated ZnO thin films and nanorods. Applied Physics Letters, 2005, 87, 222106.	3.3	262
4	Depletion-mode ZnO nanowire field-effect transistor. Applied Physics Letters, 2004, 85, 2274-2276.	3.3	228
5	ZnO spintronics and nanowire devices. Journal of Electronic Materials, 2006, 35, 862-868.	2.2	148
6	Electrical transport properties of single ZnO nanorods. Applied Physics Letters, 2004, 85, 2002-2004.	3.3	146
7	pH measurements with single ZnO nanorods integrated with a microchannel. Applied Physics Letters, 2005, 86, 112105.	3.3	135
8	Ptâˆ•ZnO nanowire Schottky diodes. Applied Physics Letters, 2004, 85, 3107-3109.	3.3	129
9	UV photoresponse of single ZnO nanowires. Applied Physics A: Materials Science and Processing, 2005, 80, 497-499.	2.3	107
10	Hydrogen and ozone gas sensing using multiple ZnO nanorods. Applied Physics A: Materials Science and Processing, 2005, 80, 1029-1032.	2.3	101
11	The study of optical band edge property of bismuth oxide nanowires Î±-Bi_2O_3. Optics Express, 2013, 21, 11965.	3.4	96
12	Synthesis and microstructure of vertically aligned ZnO nanowires grown by high-pressure-assisted pulsed-laser deposition. Journal of Materials Science, 2008, 43, 6925-6932.	3.7	80
13	Detection of hydrogen at room temperature with catalyst-coated multiple ZnO nanorods. Applied Physics A: Materials Science and Processing, 2005, 81, 1117-1119.	2.3	77
14	Enhanced Photocatalytic Activity in Î²â€Ga₂O₃ Nanobelts. Journal of the American Ceramic Society, 2011, 94, 3117-3122.	3.8	63
15	Room-Temperature Hydrogen-Selective Sensing Using Single Pt-Coated ZnO Nanowires at Microwatt Power Levels. Electrochemical and Solid-State Letters, 2005, 8, G230.	2.2	60
16	Direct Optical Observation of Band-Edge Excitons, Band Gap, and Fermi Level in Degenerate Semiconducting Oxide Nanowires In₂O₃. Journal of Physical Chemistry C, 2011, 115, 25088-25096.	3.1	58
17	Thermoreflectance characterization of Î²-Ga_2O_3 thin-film nanostrips. Optics Express, 2010, 18, 16360.	3.4	57
18	Detection of hydrogen with SnO2-coated ZnO nanorods. Applied Surface Science, 2007, 253, 4748-4752.	6.1	53

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19	Wide Bandgap Semiconductor Nanorod and Thin Film Gas Sensors. Sensors, 2006, 6, 643-666.	3.8	52
20	ZnO and Related Materials for Sensors and Light-Emitting Diodes. Journal of Electronic Materials, 2008, 37, 1426-1432.	2.2	52
21	Nucleation control for ZnO nanorods grown by catalyst-driven molecular beam epitaxy. Applied Surface Science, 2007, 253, 4620-4625.	6.1	44
22	Photoconductivities in monocrystalline layered V2O5 nanowires grown by physical vapor deposition. Nanoscale Research Letters, 2013, 8, 443.	5.7	37
23	Epitaxial growth of transparent tin oxide films on (0001) sapphire by pulsed laser deposition. Materials Research Bulletin, 2009, 44, 6-10.	5.2	36
24	Defect-induced ferromagnetism in undoped In 2 O 3 nanowires. Materials Research Bulletin, 2014, 60, 690-694.	5.2	30
25	Effect of surface roughness on nucleation and growth of vanadium pentoxide nanowires. Applied Surface Science, 2012, 258, 3584-3588.	6.1	27
26	Synthesis and characterization of Bi12O17Cl2 nanowires obtained by chlorination of Î±-Bi2O3 nanowires. Materials Letters, 2013, 113, 30-33.	2.6	27
27	Nucleation control and growth mechanism of pure Î±-Bi2O3 nanowires. Applied Surface Science, 2014, 290, 131-136.	6.1	27
28	Type-II Î±-In₂S₃/In₂O₃ nanowire heterostructures: evidence of enhanced photo-induced charge separation efficiency. RSC Advances, 2016, 6, 12561-12570.	3.6	27
29	Anisotropic x-ray absorption effects in the optical luminescence yield of ZnO nanostructures. Applied Physics Letters, 2006, 89, 093118.	3.3	25
30	Direct vapor transport synthesis of ZnGa2O4 nanowires with superior photocatalytic activity. Journal of Alloys and Compounds, 2013, 555, 325-329.	5.5	22
31	Fabrication approaches to ZnO nanowire devices. Journal of Electronic Materials, 2005, 34, 404-408.	2.2	18
32	Synthesis and characterization of single crystalline SnO2 nanorods by high-pressure pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2008, 91, 29-32.	2.3	17
33	Influence of growth ambient on the surface and structural properties of vanadium oxide nanorods. Applied Surface Science, 2013, 274, 64-70.	6.1	17
34	Getting to the Core of the Problem:â€‰ Origin of the Luminescence from (Mg,Zn)O Heterostructured Nanowires. Nano Letters, 2007, 7, 1521-1525.	9.1	16
35	A hydrogen leakage detection system using self-powered wireless hydrogen sensor nodes. Solid-State Electronics, 2007, 51, 1018-1022.	1.4	16
36	Optical Characterization of Structural Quality in the Formation of In₂O₃ Thin-Film Nanostructures. Journal of Physical Chemistry C, 2016, 120, 21983-21989.	3.1	16

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37	Early nucleation on the Si()-2Ã—1 surface. Surface Science, 2002, 514, 327-331.	1.9	15
38	Modeling and Fabrication of ZnO Nanowire Transistors. IEEE Transactions on Electron Devices, 2008, 55, 3012-3019.	3.0	13
39	Selective synthesis of Î±-Bi2O3/rGO and Î²-Bi2O3/rGO heterostructures as efficient visible-light-driven photocatalysts. Ceramics International, 2019, 45, 15334-15342.	4.8	12
40	Synthesis of Î²-Ga2O3 nanowires as a broadband emitter. Applied Physics A: Materials Science and Processing, 2011, 102, 105-108.	2.3	11
41	Solid state amorphization at the room temperature deposited Ir/Si interface. Journal of Applied Physics, 2002, 91, 1204-1208.	2.5	10
42	Photoemission study of CaF2 on Si(001)-2Ã—1 during annealing. Solid State Communications, 2003, 125, 459-462.	1.9	10
43	Broadband photodetectors based on layered 1D GaTe nanowires and 2D GaTe nanosheets. Journal of Alloys and Compounds, 2021, 876, 160195.	5.5	10
44	Synthesis of Bi2O3 nanocones over large areas by magnetron sputtering. Surface and Coatings Technology, 2015, 265, 1-6.	4.8	9
45	Single Zn2GeO4 nanowire high-performance broadband photodetector. Journal of Applied Physics, 2018, 124, .	2.5	8
46	Synthesis, optical characterization, and environmental applications of Î²-Ga2O3 nanowires. , 2019, , 67-90.		8
47	Morphology-Controlled Vapor Phase Growth and Characterization of One-Dimensional GaTe Nanowires and Two-Dimensional Nanosheets for Potential Visible-Light Active Photocatalysts. Nanomaterials, 2021, 11, 778.	4.1	6
48	Cubic (Mg,Zn)O Nanowire Growth Using Catalyst-Driven Molecular Beam Epitaxy. Journal of Materials Research, 2005, 20, 3028-3033.	2.6	5
49	ZnO-BASED NANOWIRES. Nano, 2007, 02, 201-211.	1.0	5
50	Nitrogen Doping Effect on Optical Property of Gallium Oxide Nanowires. ECS Journal of Solid State Science and Technology, 2012, 1, P78-P81.	1.8	5
51	Cathodoluminescence and Field-Emission Properties of Î²-Ga2O3 Nanobelts. Journal of Electronic Materials, 2012, 41, 3056-3061.	2.2	5
52	Observation of near-band-edge photoluminescence and UV photoresponse in near-stoichiometric Zn₂SnO₄nanowires. Materials Research Express, 2016, 3, 066201.	1.6	4
53	Facile synthesis of Bi 25 VO 40 nanowires for visible-light-driven photocatalysts. Materials Letters, 2017, 202, 73-77.	2.6	1
54	Amorphous-crystalline transition at the Ir/Si(100) interface. Journal of Applied Physics, 2003, 93, 6248-6251.	2.5	0

#	Article	IF	Citations
55	Wide Bandgap Semiconductor Nanowires for Sensing Applications. ECS Transactions, 2007, 6, 115-126.	0.5	0
56	Wide bandgap nanowire sensors. , 2007, , .		0
57	Growth of Bi₂O₃nanocones over large areas by magnetron sputtering. Proceedings of SPIE, 2015, , .	0.8	0