Abdelhamid El-Shaer

List of Publications by Year
in descending order

69	2,068	236925 25	254184 43
papers	citations	h-index	g-index

70	70	70	2300
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Zinc oxide nanorod based photonic devices: recent progress in growth, light emitting diodes and lasers. Nanotechnology, 2009, 20, 332001.	2.6	572
2	Magnetic property investigations on Mn-doped ZnO Layers on sapphire. Applied Physics Letters, 2005, 87, 062501.	3.3	97
3	Magnetite nano-spherical quantum dots decorated graphene oxide nano sheet (GO@Fe3O4): Electrochemical properties and applications for removal heavy metals, pesticide and solar cell. Applied Surface Science, 2020, 506, 144896.	6.1	75
4	High-quality ZnO layers grown by MBE on sapphire. Superlattices and Microstructures, 2005, 38, 265-271.	3.1	65
5	Molecular beam epitaxy of high-quality ZnO using hydrogen peroxide as an oxidant. Journal of Crystal Growth, 2004, 269, 356-361.	1.5	47
6	Fabrication and characterization of flexible solar cell from electrodeposited Cu2O thin film on plastic substrate. Solar Energy, 2015, 122, 1193-1198.	6.1	41
7	Fabrication and characterization of low cost Cu 2 O/ZnO:Al solar cells for sustainable photovoltaics with earth abundant materials. Solar Energy Materials and Solar Cells, 2016, 145, 454-461.	6.2	40
8	Correlation between photoluminescence and positron annihilation lifetime spectroscopy to characterize defects in calcined MgO nanoparticles as a first step to explain antibacterial activity. Journal of Alloys and Compounds, 2020, 817, 152799.	5.5	40
9	MBE growth of ZnO layers on sapphire employing hydrogen peroxide as an oxidant. Journal of Crystal Growth, 2006, 287, 7-11.	1.5	39
10	Towards low cost fabrication of inorganic white light emitting diode based on electrodeposited Cu2O thin film/TiO2 nanorods heterojunction. Materials Research Bulletin, 2019, 116, 111-116.	5.2	39
11	Coffeeâ€Stainâ€Free Perovskite Film for Efficient Printed Lightâ€Emitting Diode. Advanced Optical Materials, 2021, 9, 2100553.	7.3	36
12	Catalyst-free vapor-phase transport growth of vertically aligned ZnO nanorods on 6H-SiC and (11-20)Al2O3. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1046-1050.	0.8	35
13	ZnMgO-ZnO quantum wells embedded in ZnO nanopillars: Towards realisation of nano-LEDs. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 158-161.	0.8	35
14	Electrochemical property, antioxidant activities, water treatment and solar cell applications of titanium dioxide â€“ zinc oxide hybrid nanocomposite based on graphene oxide nanosheet. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2020, 259, 114596.	3.5	34
15	Zinc oxide nanostructures as a control strategy of bacterial speck of tomato caused by Pseudomonas syringae in Egypt. Environmental Science and Pollution Research, 2020, 27, 19049-19057.	5.3	33
16	Low cost inorganic white light emitting diode based on submicron ZnO rod arrays and electrodeposited Cu2O thin film. Materials Science in Semiconductor Processing, 2018, 81, 44-47.	4.0	32
17	Photoluminescence properties: Catalyst-free ZnO nanorods and layers versus bulk ZnO. Applied Physics Letters, 2006, 89, 231911.	3.3	31
18	Investigation of a novel (GO@CuO.Î³-Al2O3) hybrid nanocomposite for solar energy applications. Journal of Alloys and Compounds, 2021, 856, 157463.	5.5	31

#	Article	IF	Citations
19	Vapour phase transport growth of ZnO layers and nanostructures. Superlattices and Microstructures, 2007, 42, 33-39.	3.1	30
20	Optical and electrical properties of ZnMnO layers grown by peroxide MBE. Superlattices and Microstructures, 2006, 39, 291-298.	3.1	29
21	Insight into Co concentrations effect on the structural, optical, and photoelectrochemical properties of ZnO rod arrays for optoelectronic applications. Journal of Alloys and Compounds, 2021, 873, 159875.	5.5	28
22	Optical investigations and exciton localization in high quality Zn1â^'xMgxOâ€“ZnO single quantum wells. Applied Physics Letters, 2007, 91, .	3.3	27
23	Impact of substrate type on the surface and properties of electrodeposited Cu2O nanostructure films as an absorber layer for solar cell applications. Materials Science in Semiconductor Processing, 2020, 120, 105335.	4.0	27
24	Structural characterization of ZnO films grown by molecular beam epitaxy on sapphire with MgO buffer. Journal of Applied Physics, 2006, 100, 103506.	2.5	26
25	Fabrication of ZnO nanorod-based pâ€“n heterojunction on SiC substrate. Superlattices and Microstructures, 2007, 42, 415-420.	3.1	26
26	Fabrication and characterization of n-ZnO on p-SiC heterojunction diodes on 4H-SiC substrates. Superlattices and Microstructures, 2007, 42, 387-391.	3.1	26
27	Effect of thickness, bandgap, and carrier concentration on the basic parameters of Cu₂O nanostructures photovoltaics: numerical simulation study. Materials Technology, 2021, 36, 712-720.	3.0	26
28	Hybrid LEDs based on ZnOâ€nanowire arrays. Physica Status Solidi (B): Basic Research, 2010, 247, 1564-1567.	1.5	25
29	Growth of wide band gap wurtzite ZnMgO layers on (0001) Al2O3 by radical-source molecular beam epitaxy. Superlattices and Microstructures, 2007, 42, 129-133.	3.1	24
30	Effect of Potentiostatic and Galvanostatic Electrodeposition Modes on the Basic Parameters of Solar Cells Based on Cu₂O Thin Films. ECS Journal of Solid State Science and Technology, 2016, 5, Q183-Q187.	1.8	23
31	Growth of ZnO layers for transparent and flexible electronics. Thin Solid Films, 2008, 516, 1401-1404.	1.8	22
32	Demonstration of an ultraviolet ZnO-based optically pumped third order distributed feedback laser. Applied Physics Letters, 2007, 91, 111108.	3.3	20
33	Recombination dynamics and lasing in ZnOâ^•ZnMgO single quantum well structures. Applied Physics Letters, 2007, 91, 201104.	3.3	19
34	Preparation of crystalline silica (quartz, cristobalite, and tridymite) and amorphous silica powder (one step). Journal of Physics and Chemistry of Solids, 2018, 121, 22-26.	4.0	19
35	Effect of KOH molarity and annealing temperature on ZnO nanostructure properties. Chinese Journal of Physics, 2018, 56, 1001-1009.	3.9	19
36	Static laser light scattering (SLLS) investigations of the scattering parameters of a synthetic polymer. Optics and Laser Technology, 1999, 31, 447-453.	4.6	18

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37	CBE growth of high-quality ZnO epitaxial layers. Physica Status Solidi (B): Basic Research, 2006, 243, 768-772.	1.5	18
38	Magnetic property investigations on ZnMnO. Superlattices and Microstructures, 2006, 39, 381-386.	3.1	18
39	Misfit reduction by a spinel layer formed during the epitaxial growth of ZnO on sapphire using a MgO buffer layer. Journal of Crystal Growth, 2007, 308, 314-320.	1.5	18
40	One step to fabricate vertical submicron ZnO rod arrays by hydrothermal method without seed layer for optoelectronic devices. Materials Letters, 2018, 210, 366-369.	2.6	18
41	Etch-Pit Density Investigation on Both Polar Faces of ZnO Substrates. Electrochemical and Solid-State Letters, 2007, 10, H357.	2.2	16
42	Cathodoluminescence of single ZnO nanorod heterostructures. Physica Status Solidi (B): Basic Research, 2007, 244, 1458-1461.	1.5	16
43	Vapour transport growth of ZnO nanorods. Applied Physics A: Materials Science and Processing, 2007, 88, 17-20.	2.3	16
44	Compared optical properties of ZnO heteroepitaxial, homoepitaxial 2D layers and nanowires. Journal of Crystal Growth, 2009, 311, 2172-2175.	1.5	15
45	Optical Applications of ZnO Nanowires. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 896-906.	2.9	15
46	Structural, optical and dielectric investigations of electrodeposited p-type Cu2O. Journal of Materials Science: Materials in Electronics, 2019, 30, 19894-19905.	2.2	14
47	Facile and environmentally friendly fabrication of few-layer bismuthene by electrochemical exfoliation method for ultrafast photonic applications. Journal of Alloys and Compounds, 2021, 882, 160766.	5.5	14
48	Measurements of the refractive indices and refractive index increment of a synthetic PMMA solutions at 488 nm. Optics and Laser Technology, 1999, 31, 335-340.	4.6	12
49	Optical selection of the preferred solvent of a standard polymer for laser light scattering phenomena investigations. Physica B: Condensed Matter, 2000, 292, 208-212.	2.7	12
50	Magnetism in V-/Mn-doped ZnO layers fabricated on sapphire. Applied Physics A: Materials Science and Processing, 2007, 88, 161-166.	2.3	12
51	Demonstration of a ZnO/MgZnO-based one-dimensional photonic crystal multiquantum well laser. Applied Physics Letters, 2008, 93, 101109.	3.3	11
52	Improvement of physical and electrochemical properties of Cu2O thin films with Fe ions doping towards optoelectronic applications. Optical Materials, 2022, 130, 112583.	3.6	11
53	A two-step obtainment of quantum confinement in ZnO nanorods. Nanotechnology, 2006, 17, 4859-4862.	2.6	9
54	Layer by layer growth of ZnO on (0001) sapphire substrates by radical-source molecular beam epitaxy. Superlattices and Microstructures, 2007, 42, 158-164.	3.1	8

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55	Influence of Nickel Concentration on the Microstructure, Optical, Electrical, and Photoelectrochemical Properties of ZnO Nanorods Synthesized by Hydrothermal Method. Journal of Electronic Materials, 2022, 51, 910-920.	2.2	8
56	Potentiostatic Deposition and Characterization of Cuprous Oxide Thin Films. ISRN Nanotechnology, 2013, 2013, 1-4.	1.3	7
57	Studies of N-Doped p-ZnO Layers Grown on c-Sapphire by Radical Source Molecular Beam Epitaxy. Journal of the Korean Physical Society, 2008, 53, 3016-3020.	0.7	7
58	On quantum efficiency of photoluminescence in ZnO layers and nanostructures. Physica B: Condensed Matter, 2009, 404, 4813-4815.	2.7	6
59	Impact of precursor concentrations and substrate type on properties of electrodeposited CdO nanorod thin films for optoelectronic applications. Materials Science in Semiconductor Processing, 2021, 133, 105959.	4.0	6
60	Growth kinetics and properties of ZnO/ZnMgO hetero- structures grown by radical-source molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 154-157.	0.8	5
61	H2O2-molecular beam epitaxy of high quality ZnO. Applied Physics A: Materials Science and Processing, 2007, 88, 57-60.	2.3	5
62	A study of ZnMnO as a material for magneto- and spin-electronics. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1104-1108.	0.8	3
63	The effect of post-annealing treatment on the structural and optoelectronic properties of solution-processed TiO2 thin films. Journal of Materials Science: Materials in Electronics, 2021, 32, 21308-21317.	2.2	3
64	Influence of band gap and carrier concentration on ZnO/CuO solar cells performance. Egyptian Journal of Solids, 2021, 43, 158-173.	0.7	3
65	Phase transition of Cd(OH)2 and physical properties of CdO microstructures prepared by precipitation method for optoelectronic applications. IOP Conference Series: Materials Science and Engineering, 2020, 956, 012006.	0.6	2
66	Optical studies of ZnO doped with transition metals. , 2006, , .		1
67	Excitonic spectrum of the ZnO/ZnMgO quantum wells. Semiconductors, 2011, 45, 766-770.	0.5	1
68	Simulation of CuO/ZnO heteroj unction for photovoltaic applications. IOP Conference Series: Materials Science and Engineering, 2020, 956, 012005.	0.6	1
69	Structural and Spectroscopic Properties of a 2 Inch ZnO-on-Sapphire Epiwafer Grown by Using Molecular Beam Epitaxy. Journal of the Korean Physical Society, 2008, 53, 2877-2879.	0.7	1