

Ahmed Alsadig

List of Publications by Year in descending order

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papers

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citations

430874

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77
docs citations

77
times ranked

1185
citing authors

#	ARTICLE	IF	CITATIONS
1	High sensitivity and fast response and recovery times in a ZnO nanorod array/p-Si self-powered ultraviolet detector. Applied Physics Letters, 2012, 101, .	3.3	90
2	High Sensitivity pH Sensor Based on Porous Silicon (PSi) Extended Gate Field-Effect Transistor. Sensors, 2016, 16, 839.	3.8	68
3	Fabrication of low cost UV photo detector using ZnO nanorods grown onto nylon substrate. Journal of Materials Science: Materials in Electronics, 2015, 26, 1322-1331.	2.2	57
4	High performance CuS p-type thin film as a hydrogen gas sensor. Sensors and Actuators A: Physical, 2016, 249, 68-76.	4.1	50
5	Growth of vertically aligned ZnO nanorods on Teflon as a novel substrate for low-power flexible light sensors. Applied Physics A: Materials Science and Processing, 2015, 119, 1197-1201.	2.3	45
6	Fabrication of a highly flexible low-cost H ₂ gas sensor using ZnO nanorods grown on an ultra-thin nylon substrate. Journal of Materials Science: Materials in Electronics, 2016, 27, 9461-9469.	2.2	38
7	Influence of CuS membrane annealing time on the sensitivity of EGFET pH sensor. Materials Science in Semiconductor Processing, 2017, 71, 217-225.	4.0	30
8	Numerical Modeling of High Conversion Efficiency FTO/ZnO/CdS/CZTS/MO Thin Film-Based Solar Cells: Using SCAPS-1D Software. Crystals, 2021, 11, 1468.	2.2	29
9	Influences of substrate type on the pH sensitivity of CuS thin films EGFET prepared by spray pyrolysis deposition. Materials Science in Semiconductor Processing, 2017, 63, 269-278.	4.0	28
10	Areca catechu extracted natural new sensitizer for dye-sensitized solar cell: performance evaluation. Journal of Materials Science: Materials in Electronics, 2020, 31, 3564-3575.	2.2	28
11	A Study on the UV Photoresponse of Hydrothermally Grown Zinc Oxide Nanorods With Different Aspect Ratios. IEEE Sensors Journal, 2015, 15, 6811-6818.	4.7	26
12	High-performance p-n heterojunction photodetectors based on V ₂ O ₅ nanorods by spray pyrolysis. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	26
13	Effect of Annealing Time of YAG:Ce ³⁺ Phosphor on White Light Chromaticity Values. Journal of Electronic Materials, 2018, 47, 1638-1646.	2.2	24
14	Control of Phase, Structural and Optical Properties of Tin Sulfide Nanostructured Thin Films Grown via Chemical Bath Deposition. Journal of Electronic Materials, 2017, 46, 4227-4235.	2.2	23
15	Numerical Modelling Analysis for Carrier Concentration Level Optimization of CdTe Heterojunction Thin Film-Based Solar Cell with Different Non-Toxic Metal Chalcogenide Buffer Layers Replacements: Using SCAPS-1D Software. Crystals, 2021, 11, 1454.	2.2	23
16	Impact of ablation time on Cu oxide nanoparticle green synthesis via pulsed laser ablation in liquid media. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	21
17	A novel porous silicon multi-ions selective electrode based extended gate field effect transistor for sodium, potassium, calcium, and magnesium sensor. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	21
18	Erythrocyte sedimentation rate of human blood exposed to low-level laser. Lasers in Medical Science, 2016, 31, 1195-1201.	2.1	19

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19	Plasmonic Biosensors for the Detection of Lung Cancer Biomarkers: A Review. <i>Chemosensors</i> , 2021, 9, 326.	3.6	19
20	Sensitivity of CuS and CuS/ITO EGFETs implemented as pH sensors. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	18
21	Responsivity Dependent Anodization Current Density of Nanoporous Silicon Based MSM Photodetector. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-8.	2.7	16
22	Multilayer ZnO/Pd/ZnO Structure as Sensing Membrane for Extended-Gate Field-Effect Transistor (EGFET) with High pH Sensitivity. <i>Journal of Electronic Materials</i> , 2017, 46, 5901-5908.	2.2	16
23	Electrochemical Hydrogen Peroxide Sensor Based on Macroporous Silicon. <i>Sensors</i> , 2018, 18, 716.	3.8	16
24	Fabrication, characterization of ZnO nanorods on the flexible substrate (Kapton tape) via chemical bath deposition for UV photodetector applications. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	15
25	A high-sensitivity hydrogen gas sensor based on carbon nanotubes fabricated on SiO ₂ substrate. <i>Nanocomposites</i> , 2021, 7, 172-183.	4.2	15
26	Sensitivity of CuS Membrane pH Sensor With and Without MOSFET. <i>Jom</i> , 2017, 69, 1134-1142.	1.9	13
27	Catalytic growth of one-dimensional single-crystalline ZnO nanostructures on glass substrate by vapor transport. <i>Ceramics International</i> , 2017, 43, 610-616.	4.8	12
28	Effect of Addition of Polyaniline on Polyethylene Oxide and Polyvinyl Alcohol for the Fabrication of Nanorods. <i>ACS Omega</i> , 2020, 5, 22389-22394.	3.5	11
29	UV sensing of twinned ZnO/PANI composite. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	10
30	Effects of low-level laser irradiation on human blood lymphocytes in vitro. <i>Lasers in Medical Science</i> , 2017, 32, 405-411.	2.1	9
31	Tin Sulfide Flower-Like Structure as High-Performance Near-Infrared Photodetector. <i>Journal of Electronic Materials</i> , 2020, 49, 5824-5830.	2.2	9
32	Laser-induced changes of in vitro erythrocyte sedimentation rate. <i>Lasers in Medical Science</i> , 2017, 32, 2089-2095.	2.1	8
33	Hydrothermal and solvothermal synthesis of nanorods and 3D (micro/nano) V ₂ O ₅ on macro PSI substrate for pH-EGFET sensors. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 11193-11207.	2.2	8
34	Effect of nano-silica slurry on engineering, X-ray, and $\hat{\gamma}$ -ray attenuation characteristics of steel slag high-strength heavyweight concrete. <i>Nanotechnology Reviews</i> , 2020, 9, 1245-1264.	5.8	8
35	A comparative study of InN growth on quartz, silicon, C-sapphire and bulk GaN substrates by RF magnetron sputtering. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 9228-9236.	2.2	7
36	Effects of Concentration and Substrate Type on Structure and Conductivity of p-Type CuS Thin Films Grown by Spray Pyrolysis Deposition. <i>Journal of Electronic Materials</i> , 2017, 46, 218-225.	2.2	7

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37	Catalytic Growth of 1D ZnO Nanoneedles on Glass Substrates Through Vapor Transport. Journal of Electronic Materials, 2019, 48, 1660-1668.	2.2	7
38	Acetone Vapor-Sensing Properties of Chitosan-Polyethylene Glycol Using Surface Plasmon Resonance Technique. Polymers, 2020, 12, 2586.	4.5	7
39	Controllable fabrication of highly ordered thin AAO template on Si substrate for electrodeposition of nanostructures. Applied Physics A: Materials Science and Processing, 2014, 116, 1389-1393.	2.3	6
40	One-Step Synthesis of Stable Colloidal Gold Nanoparticles Through Bioconjugation with Bovine Serum Albumin in Harsh Environments. Journal of Cluster Science, 2017, 28, 3193-3207.	3.3	6
41	Low power consumption UV sensor based on n-ZnO/p-Si junctions. Journal of Materials Science: Materials in Electronics, 2019, 30, 19639-19646.	2.2	6
42	Mesoporous TiO ₂ Implanted ZnO QDs for the Photodegradation of Tetracycline: Material Design, Structural Characterization and Photodegradation Mechanism. Catalysts, 2021, 11, 1205.	3.5	6
43	Amperometric room temperature hydrogen gas sensor based on the conjugated polymers of polypyrrole-polyethylene oxide nanofibers synthesised via electrospinning. Journal of Materials Science: Materials in Electronics, 2022, 33, 7068-7078.	2.2	6
44	pH sensor based on AuNPs/ ITO membrane as extended gate field-effect transistor. Applied Physics B: Lasers and Optics, 2022, 128, 1.	2.2	6
45	Influence of the spray distance to substrate on optical properties of chemically sprayed ZnS thin films. Journal of Materials Science: Materials in Electronics, 2017, 28, 371-375.	2.2	5
46	Application of Bpw34 photodiode and cold white LED as diagnostic X-ray detectors: A comparative analysis. Applied Radiation and Isotopes, 2021, 170, 109622.	1.5	5
47	The effect of deposition angle on morphology and diameter of electrospun TiO ₂ /PVP nanofibers. Nanocomposites, 2021, 7, 70-78.	4.2	5
48	Porous silicon based violet-UV detector. , 2012, , .		4
49	The Effect of the Annealing on the Properties of ZnO/Cu/ZnO Multilayer Structures. Procedia Chemistry, 2016, 19, 38-44.	0.7	4
50	Catalyst-free growth of ZnO nanowires on ITO seed/glass by thermal evaporation method: Effects of ITO seed layer thickness. AIP Conference Proceedings, 2016, , .	0.4	4
51	Effects of low power violet laser irradiation on red blood cells volume and erythrocyte sedimentation rate in human blood. AIP Conference Proceedings, 2017, , .	0.4	4
52	Structural, Electrical and Optical Properties of Sputtered-Grown InN Films on ZnO Buffered Silicon, Bulk GaN, Quartz and Sapphire Substrates. Journal of Electronic Materials, 2018, 47, 4875-4881.	2.2	4
53	Photovoltaic Performance of Spherical TiO ₂ Nanoparticles Derived from Titanium Hydroxide Ti(OH) ₄ : Role of Annealing Varying Temperature. Energies, 2022, 15, 1648.	3.1	4
54	Ionization Radiation Shielding Effectiveness of Lead Acetate, Lead Nitrate, and Bismuth Nitrate-Doped Zinc Oxide Nanorods Thin Films: A Comparative Evaluation. Materials, 2022, 15, 3.	2.9	4

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55	EBT3 Films in Low Solar Ultraviolet and X-Ray Dose Measurement: A Comparative Analysis. Dose-Response, 2019, 17, 155932581985553.	1.6	3
56	Optimization of Precursor Concentration for the Fabrication of V2O5 Nanorods and their MSM Photodetector on Silicon Substrate. Journal of Electronic Materials, 2019, 48, 5640-5649.	2.2	3
57	AAO-Assisted Synthesis of Aligned CuO Nanorod Arrays by Electrochemical Deposition for Self-powered NIR Photodetection. Journal of Electronic Materials, 2019, 48, 7465-7473.	2.2	3
58	IMPROVEMENT IN STRUCTURAL, OPTICAL AND ELECTRICAL PROPERTIES OF ITO FILM THROUGH AIN AND HfO ₂ BUFFER LAYERS. Surface Review and Letters, 2021, 28, .	1.1	3
59	Online electrophoretic nanoanalysis using miniaturized gel electrophoresis and thermal lens microscopy detection. Journal of Chromatography A, 2021, 1657, 462596.	3.7	3
60	Effect of thermal annealing on GaN pn-junction diode with Pt/Ag as ohmic contact. Composite Interfaces, 2014, 21, 371-380.	2.3	2
61	Simulation of optimum parameters for GaN MSM UV photodetector. AIP Conference Proceedings, 2016, , .	0.4	2
62	Enhancement of Temperature Fluorescence Brightness of Zn@Si Core-Shell Quantum Dots Produced via a Unified Strategy. Nanomaterials, 2021, 11, 3158.	4.1	2
63	Improvement of Porous GaN-Based UV Photodetector with Graphene Cladding. Applied Sciences (Switzerland), 2021, 11, 10833.	2.5	2
64	Label-Free, Rapid and Facile Gold-Nanoparticles-Based Assay as a Potential Spectroscopic Tool for Trastuzumab Quantification. Nanomaterials, 2021, 11, 3181.	4.1	2
65	Formation of titanium dioxide/poly(vinylpyrrolidone) nanostructure composite by changing the flow rate of polymer solution during electrospinning. Bulletin of Materials Science, 2022, 45, .	1.7	2
66	High sensitive UV photodetector based on ZnS/PS thin film prepared via spray pyrolysis method. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 5303-5313.	2.3	2
67	Hydrothermal growth and characterization of vertically well-aligned and dense ZnO nanorods on glass and silicon using a simple optimizer system. AIP Conference Proceedings, 2016, , .	0.4	1
68	Experimental investigation of unique color-changing property of multicolored sparkling of microbubbles formed due to femtosecond laser-water interaction. Modern Physics Letters B, 2019, 33, 1950208.	1.9	1
69	Enhanced white light luminescence of Ce ³⁺ - activated Y ₃ Al ₅ O ₁₂ phosphors powder synthesized via continuous wave (CW) CO ₂ laser-assisted combustion. , 2019, , .		1
70	Comparative Studies between Porous Silicon and Porous P-Type Gallium Nitride Prepared Using Alternating Current Photo-Assisted Electrochemical Etching Technique. Journal of Physics: Conference Series, 2020, 1535, 012044.	0.4	1
71	Innovative Approaches to Synthesize Novel Graphene Materials. Current Nanoscience, 2021, 17, .	1.2	1
72	Effect of sulphuric acid (H ₂ SO ₄) on the growth process of two-dimensional zinc oxide (ZnO) structures prepared by chemical bath deposition. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	1

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73	Extended Gate Field Effect Transistor-Based N-Type Gallium Nitride as a pH Sensor. Journal of Electronic Materials, 2021, 50, 7071-7077.	2.2	1
74	Investigation of X-ray Radiation Detectability Using Fabricated ZnO-PB Based Extended Gate Field-Effect Transistor as X-ray Dosimeters. Applied Sciences (Switzerland), 2021, 11, 11258.	2.5	1
75	Synthesis of Architectural-Cubic Porous Silicon by Electroless Stain Etching in V2O5 and HF Solution. Silicon, 2020, 12, 1761-1768.	3.3	0
76	Growth evolution and customized attributes of catalyst-free ZnO nanowires: role of varied Ar/O2 flow rate. Journal of Materials Science: Materials in Electronics, 2020, 31, 17422-17431.	2.2	0
77	Structural and optical properties of ZnO nanoflakes/Al/glass via laser-assisted chemical bath deposition (LACBD) technique. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	0