## **Shahrom Mahmud**

List of Publications by Year in descending order

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91 papers 4,437 citations

236925 25 h-index 64 g-index

91 all docs 91 docs citations

91 times ranked 6559 citing authors

#	Article	IF	CITATIONS
1	Novel Pluronic Fâ€127â€coated <scp>ZnO</scp> nanoparticles: Synthesis, characterization, and their inâ€vitro cytotoxicity evaluation. Polymers for Advanced Technologies, 2021, 32, 2541-2551.	3.2	12
2	Impact of thermal interface material on luminous flux curve of InGaAlP low-power light-emitting diodes. Soldering and Surface Mount Technology, 2021, ahead-of-print, .	1.5	1
3	Cytotoxicity determination of nano-zinc oxide eugenol on human gingival fibroblast cells. Materials Chemistry and Physics, 2021, 268, 124649.	4.0	4
4	Enhancement of luminous flux of InGaAlP-based low-power SMD LEDs using substrates with different thermal resistances. Microelectronics International, 2021, 38, 6-13.	0.6	0
5	Effect of etching time on characterizations of porous silicon passivated by a nano-silver layer. Journal of Physics: Conference Series, 2020, 1529, 032106.	0.4	1
6	Research on dynamic thermal performance of high-power ThinGaN vertical light-emitting diodes with different submounts. Semiconductor Science and Technology, 2020, 35, 125009.	2.0	1
7	Characterization and <i>In Vitro </i> Toxicity of French Process Zinc Oxide Nanoparticles with High Surficial Zinc. Solid State Phenomena, 2019, 290, 274-279.	0.3	O
8	Surface morphological and mechanical properties of zinc oxide eugenol using different types of ZnO nanopowder. Materials Science and Engineering C, 2019, 100, 645-654.	7.3	12
9	Evaluation of junction temperature of LED package as a function of input current and ambient temperature. AIP Conference Proceedings, 2019, , .	0.4	0
10	Investigation on effects of solder paste voids on thermal and optical performance of white high-power surface-mounted device LEDs. Soldering and Surface Mount Technology, 2019, 32, 104-114.	1.5	4
11	Chemical Sensing Performance of Flower-Like ZnO/PSi Nanostructures via Electrochemical Impedance Spectroscopy Technique. Journal of Electronic Materials, 2019, 48, 1604-1611.	2.2	3
12	Application of antimicrobial active packaging film made of semolina flour, nano zinc oxide and nanoâ€kaolin to maintain the quality of lowâ€moisture mozzarella cheese during lowâ€temperature storage. Journal of the Science of Food and Agriculture, 2019, 99, 2716-2725.	3.5	57
13	Fabrication of UV photodetector using needle-shaped ZnO nanostructure arrays prepared on porous silicon substrate by a facile low-temperature method. Journal of Materials Science: Materials in Electronics, 2018, 29, 4999-5008.	2.2	17
14	Ultraviolet Protection Properties of Commercial Sunscreens and Sunscreens Containing Zno Nanorods. Journal of Physics: Conference Series, 2018, 1083, 012012.	0.4	9
15	Physico-mechanical and microstructural properties of semolina flour films as influenced by different sorbitol/glycerol concentrations. International Journal of Food Properties, 2018, 21, 983-995.	3.0	38
16	Structural, Electrical and Optical Properties of NiO Nanostructured Growth Using Thermal Wet and Dry Oxidation of Nickel Metal Thin Film. Journal of Nanoelectronics and Optoelectronics, 2018, 13, 628-636.	0.5	0
17	Fabrication and characterization of novel semolina-based antimicrobial films derived from the combination of ZnO nanorods and nanokaolin. Journal of Food Science and Technology, 2017, 54, 105-113.	2.8	19
18	In-vitro efficacy of different morphology zinc oxide nanopowders on Streptococcus sobrinus and Streptococcus mutans. Materials Science and Engineering C, 2017, 78, 868-877.	7.3	19

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19	Improving the physical and protective functions of semolina films by embedding a blend nanofillers (ZnO-nr and nano-kaolin). Food Packaging and Shelf Life, 2017, 12, 66-75.	<b>7.</b> 5	38
20	Characterization of Semolina Protein Film with Incorporated Zinc Oxide Nano Rod Intended for Food Packaging. Polish Journal of Food and Nutrition Sciences, 2017, 67, 183-190.	1.7	27
21	Molecular dynamics simulations and photoluminescence measurements of annealed ZnO surfaces. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 90, 28-36.	2.7	4
22	Structural, Electrical and Optical Properties of NiO Nanostructured Growth Using Thermal Wet Oxidation of Nickel Metal Thin Film. Journal of Nano Research, 2017, 49, 56-65.	0.8	2
23	Cytotoxicity evaluation of ZnO-eugenol (ZOE) using different ZnO structure on human gingival fibroblast. AIP Conference Proceedings, 2017, , .	0.4	2
24	Effects of precursor concentrations on the optical and morphological properties of ZnO nanorods on glass substrate for UV photodetector. Superlattices and Microstructures, 2017, 111, 536-545.	3.1	29
25	Properties of NiO nanostructured growth using thermal dry oxidation of nickel metal thin film for hydrogen gas sensing at room temperature. Materials Research Express, 2017, 4, 075009.	1.6	13
26	Optical and structural properties of well-aligned ZnO nanoneedle arrays grown on porous silicon substrates by electric field-assisted aqueous solution method. Ceramics International, 2017, 43, 1488-1494.	4.8	10
27	Heat transfer enhancement in MOSFET mounted on different FR4 substrates by thermal transient measurement. Chinese Physics B, 2017, 26, 098901.	1.4	1
28	Investigation on the Structural and Optical Properties of NiO Nanoflakes. Chemical Bath Deposition of Ni(OH)2 Thin Films. Ukrainian Journal of Physics, 2017, 62, 970-977.	0.2	0
29	Preferential cytotoxicity of ZnO nanoparticle towards cervical cancer cells induced by ROS-mediated apoptosis and cell cycle arrest for cancer therapy. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	29
30	Preparation and characterization of bionanocomposite films reinforced with nano kaolin. Journal of Food Science and Technology, 2016, 53, 1111-1119.	2.8	54
31	Photoconductivity of Pharma-Grade ZnO under UVA and White Light Exposure. Advanced Materials Research, 2015, 1108, 73-78.	0.3	0
32	Structural morphology of zinc oxide structures with antibacterial application of calamine lotion. AIP Conference Proceedings, 2015, , .	0.4	3
33	Toxicity evaluation of ZnO nanostructures on L929 fibroblast cell line using MTS assay. AIP Conference Proceedings, 2015, , .	0.4	2
34	Effects of frit addition on the surface morphology and structural properties of ZnO-Bi2O3-Mn2O3 discs. AIP Conference Proceedings, 2015, , .	0.4	0
35	High-Performance Dye-Sensitized Solar Cells Based on Morphology-Controllable Synthesis of ZnO–ZnS Heterostructure Nanocone Photoanodes. PLoS ONE, 2015, 10, e0123433.	2.5	45
36	Well-aligned ZnO nanoneedle arrays grown on polycarbonate substrates via electric field-assisted chemical method. Materials Letters, 2015, 146, 65-68.	2.6	41

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37	Structural morphology and in vitro toxicity studies of nano- and micro-sized zinc oxide structures. Journal of Environmental Chemical Engineering, 2015, 3, 436-444.	6.7	14
38	Facile synthesis of vertically aligned cone-shaped ZnO/ZnS core/shell arrays using the two-step aqueous solution approach. Materials Letters, 2015, 147, 34-37.	2.6	44
39	Direct growth of flower-like ZnO nanostructures on porous silicon substrate using a facile low-temperature technique. Materials Letters, 2015, 160, 444-447.	2.6	41
40	Review on Zinc Oxide Nanoparticles: Antibacterial Activity and Toxicity Mechanism. Nano-Micro Letters, 2015, 7, 219-242.	27.0	2,782
41	Synthesis of needle-shape ZnO-ZnS core-shell heterostructures and their optical and field emission properties. Electronic Materials Letters, 2015, 11, 957-963.	2.2	43
42	Enhancement in the Electrical and Thermal Properties of Ethylene Vinyl Acetate (EVA) Co-Polymer by Zinc Oxide Nanoparticles. Open Journal of Composite Materials, 2015, 05, 79-91.	0.8	19
43	The effect of emitter geometry on lateral field emission diodes fabricated by AFM-based electrochemical nanolithography. Journal of Solid State Electrochemistry, 2014, 18, 1695-1700.	2.5	20
44	Particle size and annealing ambient effect on properties of ZnO–Bi2O3–Mn2O3 varistor derived from ZnO micro- and nanoparticle powders. Superlattices and Microstructures, 2014, 69, 212-225.	3.1	16
45	A novel method for synthesis of well-aligned hexagonal cone-shaped ZnO nanostructures in field emission applications. Materials Letters, 2014, 125, 147-150.	2.6	39
46	Optical properties of well-aligned ZnO nanostructure arrays synthesized by an electric field-assisted aqueous solution method. Ceramics International, 2014, 40, 11193-11198.	4.8	42
47	Effect of surface modification and UVA photoactivation on antibacterial bioactivity of zinc oxide powder. Applied Surface Science, 2014, 292, 405-412.	6.1	32
48	Antibacterial responses of zinc oxide structures against Staphylococcus aureus, Pseudomonas aeruginosa and Streptococcus pyogenes. Ceramics International, 2014, 40, 2993-3001.	4.8	103
49	Static and dynamic compressive properties of polypropylene/zinc oxide nanocomposites. Polymer Engineering and Science, 2014, 54, 949-960.	3.1	5
50	Physico-chemical characteristics of ZnO nanoparticles-based discs and toxic effect on human cervical cancer HeLa cells. , $2014,  ,  .$		1
51	In-vitro antibacterial study of zinc oxide nanostructures on Streptococcus sobrinus., 2014,,.		0
52	In vitro cytotoxicity tests of ZnOâ€Bi2O3â€Mn2O3-based varistor fabricated from ZnO micro and nanoparticle powders on L929 mouse cells. , 2014, , .		0
53	Effects of high-oxygen thermal annealing on structural, electrical and optical properties of undoped ZnO discs made from 40-nm ZnO nanoparticles. Indian Journal of Physics, 2013, 87, 523-531.	1.8	8
54	Physical properties of fish gelatin-based bio-nanocomposite films incorporated with ZnO nanorods. Nanoscale Research Letters, 2013, 8, 364.	5.7	144

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55	Electron spectroscopy imaging and surface defect configuration of zinc oxide nanostructures under different annealing ambient. Applied Surface Science, 2013, 265, 137-144.	6.1	17
56	Structural, Optical and Antibacterial Properties of ZnO Commercial Powder Grades. Advanced Materials Research, 2013, 795, 19-23.	0.3	0
57	Field emission in lateral silicon diode fabricated by atomic force microscopy lithography. Electronics Letters, 2012, 48, 712.	1.0	43
58	Fabrication of an Electrically-Resistive, Varistor-Polymer Composite. International Journal of Molecular Sciences, 2012, 13, 15640-15652.	4.1	11
59	Optical Properties and Antibacterial Bioactivity of ZnO Nanopowder Annealed in Different Ambient. Advanced Materials Research, 2012, 626, 324-328.	0.3	1
60	Photoluminescence and Raman Studies of Annealed ZnO Nanostructures. Advanced Materials Research, 2012, 501, 179-183.	0.3	1
61	Impact of high-oxygen thermal annealing on the structural, optical and electrical properties of ZnO discs made from 20-nm ZnO nanoparticles. , 2012, , .		0
62	Density impact of doped ZnO discs on the structural, electrical and optical properties in the ohmic region. , $2012$ , , .		0
63	Post-Growth Annealing Effects on the Photoluminescence of ZnO Nanoparticle-Based Discs. Advanced Materials Research, 2012, 626, 844-848.	0.3	1
64	Controlling the shape and gap width of silicon electrodes using local anodic oxidation and anisotropic TMAH wet etching. Semiconductor Science and Technology, 2012, 27, 065001.	2.0	40
65	Effect of temperature treatment on the properties of ZnO nanoparticle-Bi <inf>0<inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3</inf>0<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf>3<inf< td=""><td></td><td>0</td></inf<></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf></inf>		0
66	Quantum size effect on ZnO nanoparticle-based discs synthesized by mechanical milling. Applied Surface Science, 2012, 258, 8026-8031.	6.1	38
67	Comparative study on the effects of different annealing conditions on the surface morphology, crystallinity, and optical properties of ZnO micro/nanoparticle-based discs. Applied Surface Science, 2012, 258, 9954-9960.	6.1	7
68	Impact of sintering temperature on the structural, electrical, and optical properties of doped ZnO nanoparticle-based discs. Applied Surface Science, 2012, 261, 128-136.	6.1	14
69	Antimicrobial, rheological, and physicochemical properties of sago starch films filled with nanorod-rich zinc oxide. Journal of Food Engineering, 2012, 113, 511-519.	5 <b>.</b> 2	193
70	The effect of loading rates and particle geometry on compressive properties of polypropylene/zinc oxide nanocomposites: Experimental and numerical prediction. Polymer Composites, 2012, 33, 99-108.	4.6	12
71	Optimisation of nanooxide mask fabricated by atomic force microscopy nanolithography: a response surface methodology application. Micro and Nano Letters, 2012, 7, 325.	1.3	42
72	One-dimensional growth of zinc oxide nanostructures from large micro-particles in a highly rapid synthesis. Journal of Alloys and Compounds, 2011, 509, 4035-4040.	5 <b>.</b> 5	42

#	Article	IF	CITATIONS
73	Fabrication of nanogap electrodes via nano-oxidation mask by scanning probe microscopy nanolithography. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2011, 10, 043002.	0.9	38
74	Effect of Particle Morphology on the Properties of Polypropylene/Nanometric Zinc Oxide (PP/Nanozno) Composites. Advanced Composites Letters, 2009, 18, 096369350901800.	1.3	14
75	Growth Model for Nanoplates and Nanoboxes of Zinc Oxide from a Catalystâ€Free Combustâ€Oxidized Process. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2006, 36, 17-22.	0.6	4
76	Nanostructure of ZnO Fabricated via French Process and its Correlation to Electrical Properties of Semiconducting Varistors. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2006, 36, 155-159.	0.6	32
77	Growth model for nanomallets of zinc oxide from a catalyst-free combust-oxidised process. Journal of Crystal Growth, 2006, 287, 118-123.	1.5	16
78	Increase in Upturn Power Dissipation of Surge Suppressors Due to Highly Defective Nanostructure of Zinc Oxide. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2006, 36, 59-64.	0.6	4
79	Novel modelling for high-field current-voltage characteristics of semiconducting varistors. , 2004, , .		2
80	Nanotripods of Zinc Oxide. , 0, , .		4
81	Effects of Annealing Treatment on Structural, Optical and Morphology Characteristics of ZnO Nanostructures. Advanced Materials Research, 0, 626, 967-970.	0.3	1
82	Varistor-Like Effect in Zinc Oxide Bionanocomposite. Advanced Materials Research, 0, 626, 743-746.	0.3	0
83	Effects of Annealing Treatment on Photoluminescence and Structural Properties of ZnO Nanostructures. Advanced Materials Research, 0, 501, 184-188.	0.3	o
84	Characterization of ZnO Nanopowder and Antibacterial Response against <i>Staphylococcus aureus </i> under UVA Illumination. Advanced Materials Research, 0, 795, 148-152.	0.3	3
85	Analysis of Stress and Strain in ZnO Nanoparticle-Bi <sub>2</sub> 0 <sub>3</sub> -Mn <sub>2</sub> 0 <sub>3&lt;, Varistor Ceramics at Different Annealing Temperatures. Advanced Materials Research, 0, 795, 35-41.</sub>	/ <b>ബ</b> b>	O
86	Enhanced Photoconductivity and Antibacterial Response of Rubber-Grade ZnO upon UVA Illumination. Advanced Materials Research, 0, 925, 33-37.	0.3	0
87	Substrate Effect on Growth Behaviour of Well-Aligned ZnO Nanorods Using an Aqueous Solution Method. Applied Mechanics and Materials, 0, 695, 147-150.	0.2	O
88	A Comparative Study between the Effects of Oxidizing and Reducing Atmospheres on the Properties of ZnO-Bi <sub>2</sub> 0 <sub>3</sub> -Mn <sub>2</sub> 0 <sub>3</sub> Varistor Fabricated from Micro and Nanoparticles Size of ZnO. Advanced Materials Research, 0, 925, 428-432.	0.3	1
89	Optimum Annealing Temperature for Transformation of NiO Nanoflakes from Chemically Grown Ni(OH) <sub>2</sub> Nanostructure Thin Film. Journal of Nano Research, 0, 49, 75-84.	0.8	3
90	The Study on the Effect of Wet and Dry Oxidation of Nickel Thin Film on Sensitivity of EGFET Based pH Sensor. Solid State Phenomena, 0, 290, 199-207.	0.3	3

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91	Cytotoxicity of Pharma Grade ZnO with Higher Surficial Oxygen on L929 Mouse Cell. Solid State Phenomena, 0, 290, 286-291.	0.3	O