Nafarizal Nayan

List of Publications by Citations

129 papers	838 citations	17 h-index	22 g-index
167 ext. papers	1,125 ext. citations	1.9 avg, IF	4.41 L-index

#	Paper	IF	Citations
129	Healing of fatigue damage in NiTi shape memory alloys. *Journal Physics D: Applied Physics*, **2008**, 41, 185408	3	52
128	Inorganic thermoelectric materials: A review. *International Journal of Energy Research*, **2020**, 44, 6170-6222	4.5	47
127	Unnotched fatigue behavior of an austenitic NiTi shape memory alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 497, 333-340	5.3	32
126	Effect of Scandium addition on evolution of microstructure, texture and mechanical properties of thermo-mechanically processed Al-Li alloy AA2195. *Journal of Alloys and Compounds*, **2018**, 740, 364-374	5.7	30
125	Spatial distribution of the velocity distribution function of Fe atoms in a magnetron sputtering plasma source. *Journal of Applied Physics*, **2005**, 98, 043310	2.5	25
124	Cytotoxicity of MXene-based nanomaterials for biomedical applications: A mini review. *Environmental Research*, **2021**, 201, 111592	7.9	25
123	Two-Dimensional Distributions of Ti and Ti+Densities in High-Pressure Magnetron Sputtering Discharges. *Japanese Journal of Applied Physics*, **2005**, 44, L737-L739	1.4	23
122	Ag-nanoparticle as a Q switched device for tunable C-band fiber laser. *Optics Communications*, **2016** , 381, 85-90	2	23
121	Effect of oxygen flow rate on the ultraviolet sensing properties of zinc oxide nanocolumn arrays grown by radio frequency magnetron sputtering. *Ceramics International*, **2016**, 42, 4107-4119	5.1	22
120	Dye-sensitized solar Cell using pure anatase TiO2 annealed at different temperatures. *Optik*, **2017**, 140, 1063-1068	2.5	20
119	Production of Ar metastable atoms in the late afterglow of pulse-modulated rf magnetron sputtering plasmas. *Journal Physics D: Applied Physics*, **2008**, 41, 035206	3	20
118	Tunable single wavelength erbium-doped fiber ring laser based on in-line Mach-Zehnder strain. *Optik*, **2016**, 127, 8326-8332	2.5	19
117	Biophysical characteristics of cells cultured on cholesteryl ester liquid crystals. *Micron*, **2014**, 56, 73-9	2.3	19
116	Ambient and cryogenic tensile properties of AA2195T87 sheets with pre-aging cold work by a combination of cold rolling and stretching. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 585, 475-479	5.3	19
115	Surface Study of CuO Nanopetals by Advanced Nanocharacterization Techniques with Enhanced Optical and Catalytic Properties. *Nanomaterials*, **2020**, 10,	5.4	19
114	Raman investigation of rutile-phased TiO2 nanorods/nanoflowers with various reaction times using one step hydrothermal method. *Journal of Materials Science: Materials in Electronics*, **2016**, 27, 7920-7926	2.1	18
113	Deposition profile of Ti film inside a trench and its correlation with gas-phase ionization in high-pressure magnetron sputtering. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2006**, 24, 2206-2211	2.9	17

112	Titanium dioxide-based Q-switched dual wavelength in the 1 micron region. *Chinese Optics Letters*, **2016**, 14, 091403-91407	2.2	17
111	Fabrication and characterization of rutile-phased titanium dioxide (TiO2) nanorods array with various reaction times using one step hydrothermal method. *Optik*, **2018**, 154, 510-515	2.5	15
110	Differences between two strains of Ceriporiopsis subvermispora on improving the nutritive value of wheat straw for ruminants. *Journal of Applied Microbiology*, **2017**, 123, 352-361	4.7	14
109	Difference in structural and chemical properties of sol-gel spin coated Al doped TiO, Y doped TiO and Gd doped TiO based on trivalent dopants.. *RSC Advances*, **2018**, 8, 29686-29697	3.7	13
108	A Review on The Exploration of Nanomaterials Application in Pavement Engineering. *Jurnal Teknologi (Sciences and Engineering)*, **2015**, 73,	1.2	13
107	Interfacial study of cell adhesion to liquid crystals using widefield surface plasmon resonance microscopy. *Colloids and Surfaces B: Biointerfaces*, **2013**, 110, 156-62	6	12
106	Improved Sensitivity and Selectivity of Direct Localized Surface Plasmon Resonance Sensor Using Gold Nanobipyramids for Glyphosate Detection. *IEEE Sensors Journal*, **2019**, 1-1	4	12
105	Reduced graphene oxide-multiwalled carbon nanotubes hybrid film with low Pt loading as counter electrode for improved photovoltaic performance of dye-sensitised solar cells. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 10723-10743	2.1	11
104	A review of nanotechnological applications to detect and control surface water pollution. *Environmental Technology and Innovation*, **2021**, 24, 102032	7	10
103	Synthesis, characterization and biophysical evaluation of the 2D Ti2CTx MXene using 3D spheroid-type cultures. *Ceramics International*, **2021**, 47, 22567-22577	5.1	10
102	Microstructure and Mechanical Properties of Cryorolled Aluminum Alloy AA2219 in Different Thermomechanical Processing Conditions. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2017**, 48, 321-341	2.3	9
101	Sticking probability of Ti atoms in magnetron sputtering deposition evaluated from the spatial distribution of Ti atom density. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2007**, 25, 308-311	2.9	9
100	Measurement of Cu atom density in a magnetron sputtering plasma source using an YBaCuO target by laser-induced fluorescence imaging spectroscopy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2006**, 24, 2100-2104	2.9	9
99	High-Temperature Deformation Processing Map Approach for Obtaining the Desired Microstructure in a Multi-component (Ni-Ti-Cu-Fe) Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 2201-2215	2.3	8
98	Effect of heat treatment to the rutile based dye sensitized solar cell. *Optik*, **2016**, 127, 4076-4079	2.5	8
97	Warm Mix Asphalt Technology: A Review. *Jurnal Teknologi (Sciences and Engineering)*, **2014**, 71,	1.2	8
96	Mixing Studies Related to the Cleaning of Molten Aluminium. *Chemical Engineering and Technology*, **2004**, 27, 310-314	2	8
95	Silicon-based microring resonators for multi-solitons generation for THz communication. *Optical and Quantum Electronics*, **2016**, 48, 1	2.4	8

94	Synthesis characteristics of Cu particulates in high-pressure magnetron sputtering plasmas studied byin situlaser-light scattering. *Journal Physics D: Applied Physics*, **2012**, 45, 505202	3	7
93	Enhancement of Ti+density in high-pressure magnetron sputtering plasmas. *Journal Physics D: Applied Physics*, **2010**, 43, 124012	3	7
92	Are dominant sputtering products from metal targets really monatomic?. *Vacuum*, **2008**, 83, 463-466	3.7	7
91	Sol-Gel Synthesis of TiO₂ Thin Films from In-House Nano-TiO₂ Powder. *Advances in Materials Physics and Chemistry*, **2012**, 02, 16-20	0.5	7
90	A portable respiratory rate estimation system with a passive single-lead electrocardiogram acquisition module. *Technology and Health Care*, **2016**, 24, 591-7	1.1	7
89	Analysis of Microstructure and Texture Evolution in Mg-3Al-1Zn Alloy Processed Through Groove Rolling. *Journal of Materials Engineering and Performance*, **2015**, 24, 2091-2098	1.6	6
88	Fabrication of inverted bulk heterojunction organic solar cells based on conjugated P3HT:PCBM using various thicknesses of ZnO buffer layer. *Optik*, **2015**, 126, 645-648	2.5	6
87	Sticking probabilities of Cu, Zn, Sn, and S atoms in magnetron sputtering plasmas employing a Cu2ZnSnS4 stoichiometric target. *Vacuum*, **2015**, 121, 26-31	3.7	6
86	Kinetics of the Pyrolysis and Combustion Characteristics of Non-edible Oilseeds (Karanja and Neem Seed) Using Thermogravimetric Analysis. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, **2015**, 37, 2352-2359	1.6	6
85	Characterization of TiAlBN Nanocomposite Coating Deposited via Radio Frequency Magnetron Sputtering Using Single Hot-Pressed Target. *Advanced Materials Research*, **2012**, 626, 298-301	0.5	6
84	Corrosion Behavior of AZ91 Mg-Alloy Coated with AlN and TiN in NaCl and Hank's Solution. *Advanced Materials Research*, **2012**, 626, 275-279	0.5	6
83	Investigations of Production Processes of Ti+in High-Pressure Magnetron Sputtering Plasmas. *Japanese Journal of Applied Physics*, **2009**, 48, 126003	1.4	6
82	Thermoelectric Generator: Materials and Applications in Wearable Health Monitoring Sensors and Internet of Things Devices. *Advanced Materials Technologies*,2101203	6.8	6
81	One-step wet chemical synthesis of gold nanoplates on solid substrate using poly-l-lysine as a reducing agent. *MethodsX*, **2018**, 5, 1618-1625	1.9	6
80	Performance comparison between silicon solar panel and dye-sensitized solar panel in Malaysia **2017**,		5
79	Correlation between Microstructure of Copper Oxide Thin Films and its Gas Sensing Performance at Room Temperature. *Procedia Chemistry*, **2016**, 20, 45-51		5
78	Sputter Deposition of Cuprous and Cupric Oxide Thin Films Monitored by Optical Emission Spectroscopy for Gas Sensing Applications. *Procedia Chemistry*, **2016**, 20, 124-129		5
77	Investigation of the Structural, Optical and Electrical Properties of Gadolinium-Doped Zinc Oxide Films Prepared by Sol-Gel Method. *Advanced Materials Research*, **2016**, 1133, 424-428	0.5	5

76	Precise Control of Metal Oxide Thin Films Deposition in Magnetron Sputtering Plasmas for High Performance Sensing Devices Fabrication. *Procedia Chemistry*, **2016**, 20, 93-97		5
75	Low-temperature-dependent growth of titanium dioxide nanorod arrays in an improved aqueous chemical growth method for photoelectrochemical ultraviolet sensing. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 1017-1033	2.1	5
74	Influence of outlet channel width to the flow velocity and pressure of a flow focusing microfluidic device. *IOP Conference Series: Materials Science and Engineering*, **2016**, 160, 012086	0.4	4
73	Computation of the homogenization regime for aluminum alloy AA2219 on the basis of diffusion theory. *Metal Science and Heat Treatment*, **2005**, 47, 522-525	0.6	4
72	Analysis of the Effect of Growth Parameters on Graphene Synthesized by Chemical Vapor Deposition. *Journal of Nanoelectronics and Optoelectronics*, **2015**, 10, 50-55	1.3	4
71	Effect of anneal temperature on fluorine doped tin oxide (FTO) nanostructured fabricated using hydrothermal method **2017**,		3
70	Hydrophobic rutile phase TiO2 nanostructure and its properties for self-cleaning application **2017**,		3
69	Oxide semiconductors for solar to chemical energy conversion: nanotechnology approach. *Ionics*, **2014**, 20, 581-592	2.7	3
68	FPGA design and implementation of Electrocardiogram biomedical embedded system **2014**,		3
67	Optimization of RF magnetron sputtering plasma using Zn target **2010**,		3
66	Absorbance Analysis of Escherichia coli (E. coli) Bacteria Suspension in Polydimethylsiloxane (PDMS)-Glass Based Microfluidic. *Advanced Materials Research*, **2016**, 1133, 65-69	0.5	3
65	Effect of Deposition Time on Gd doped ZnO using Simultaneous RF and DC Sputtering **2019**,		3
64	Investigation of Si-based thermoelectrochemical cells (TECs) towards semiconductor fabrication and processing. *Semiconductor Science and Technology*, **2021**, 36, 115006	1.8	3
63	The influence of N2 flow rate on Ar and Ti Emission in high-pressure magnetron sputtering system plasma **2017**,		2
62	Adsorption effect of oxygen on ZnO Nanowires (100 nm) leading towards pronounced edge effects and voltage enhancement. *Materials Research Express*, **2020**, 7, 095004	1.7	2
61	Plasma diagnostic by optical emission spectroscopy on reactive magnetron sputtering plasma A Brief Introduction. *Journal of Physics: Conference Series*, **2018**, 1027, 012005	0.3	2
60	Bias voltage dependent structure and morphology evolution of magnetron sputtered YSZ thin film: a basic insight. *Materials Research Express*, **2019**, 6, 106414	1.7	2
59	Atmospheric pressure plasma needle jet treated on aluminium thin film for semiconductor industries. *Materials Today: Proceedings*, **2019**, 7, 715-720	1.4	2

58	Morphology, topography and thickness of copper oxide thin films deposited using magnetron sputtering technique **2013**,		2
57	Zero voltage switching driver and flyback transformer for generation of atmospheric pressure plasma jet **2017**,		2
56	Fabrication and Characterisation of the Electrical and Physical Properties of the Mask Printed Graphite Paste Electrodes on Paper Substrates. *Advanced Materials Research*, **2014**, 925, 510-513	0.5	2
55	Transmission of Microwave Signal through Metal-Oxide Thin Film of Energy Saving Glass Using Different Shape of Frequency Selective Structure. *Advanced Materials Research*, **2014**, 925, 630-634	0.5	2
54	Surface Morphology and Optical Properties of ZnO Films Synthesis Using Different Solvent. *Advanced Materials Research*, **2013**, 832, 478-482	0.5	2
53	Surface Tension Analysis of Cost-Effective Paraffin Wax and Water Flow Simulation for Microfluidic Device. *Advanced Materials Research*, **2013**, 832, 773-777	0.5	2
52	HANDLING EMERGENCE OF DYNAMIC VISUAL REPRESENTATION DESIGN FOR COMPLEX ACTIVITIES IN THE COLLABORATION. *Jurnal Teknologi (Sciences and Engineering)*, **2016**, 78,	1.2	2
51	Effects of Oxygen (O2) Plasma Treatment in Promoting the Germination and Growth of Chili. *Plasma Chemistry and Plasma Processing*,1	3.6	2
50	ZnO nanowires based schottky contacts of Rh/ZnO interfaces for the enhanced performance of electronic devices. *Surfaces and Interfaces*, **2020**, 21, 100649	4.1	2
49	FSS Design for Improving Transmission of Microwave Signals and Wireless Security in Modern Buildings. *Journal of Electronic Materials*, **2021**, 50, 3438-3446	1.9	2
48	Interface study of hybrid CuO nanoparticles embedded ZnO nanowires heterojunction synthesized by controlled vapor deposition approach for optoelectronic devices. *Optical Materials*, **2021**, 117, 111132	3.3	2
47	Comparison of biophysical properties characterized for microtissues cultured using microencapsulation and liquid crystal based 3D cell culture techniques. *Cytotechnology*, **2018**, 70, 13-29	2.2	2
46	A simple temperature evaluation in high-pressure magnetron sputtering plasma using optical emission spectroscopy (OES) technique **2017**,		1
45	Electrical and optical characteristics of atmospheric pressure plasma needle jet driven by neon trasformer **2017**,		1
44	Development of atmospheric pressure plasma needle jet for sterilization applications **2017**,		1
43	Fabrication of TiO2 nanostructures on porous silicon for thermoelectric application **2017**,		1
42	Influence of Oxygen Flow Rate on Sputter Deposition Rate and SEM Image of Copper Oxide Thin Films. *Applied Mechanics and Materials*, **2015**, 773-774, 711-715	0.3	1
41	Effect of Substrate Bias in Copper Sputtering Plasma Measured by Langmuir Probe. *Advanced Materials Research*, **2014**, 925, 238-242	0.5	1

40	Effects of Ageing Time of ZnO Sol on Properties of ZnO Films by Sol Gel Spin Coating. *Advanced Materials Research*, **2014**, 925, 329-333	0.5	1
39	Numerical Simulation of Water Flow Velocity for Microfluidic Application Using COMSOL Multiphysics. *Advanced Materials Research*, **2014**, 925, 651-655	0.5	1
38	Characterization of acrylate-based ChemFET sensor for nitrate sensing and monitoring **2014**,		1
37	Performance of Ultraviolet Photoconductive Sensor Based on Aluminium-Doped Zinc Oxide Nanorod-Nanoflake Network Thin Film Using Aluminium Contacts. *Advanced Materials Research*, **2013**, 832, 298-302	0.5	1
36	Rutile Phased Titanium Dioxide (TiO2) Nanorod/Nanoflower Based Waste Water Treatment Device. *Advances in Intelligent Systems and Computing*, **2017**, 483-490	0.4	1
35	Effect of Nitrogen-to-Total Gas Flow Ratio on the Nanocomposite TiAlBN Coating. *Applied Mechanics and Materials*, **2015**, 761, 431-435	0.3	1
34	Performance of P3HT:PCBM Organic Solar Cell with ZnO Buffer Layer. *Advanced Materials Research*, **2014**, 925, 580-584	0.5	1
33	Influences of Preheating Temperature on the Structural and Optical Properties of ZnO Thin Films by So-Gel Spin Coating Technique. *Advanced Materials Research*, **2014**, 925, 401-405	0.5	1
32	Effects of trypsin and cytochalasin-B treatments to cell traction forces **2012**,		1
31	ZnO nanostructures grown on porous silicon substrate without catalyst **2012**,		1
30	Optimization of Transmission Lost for Energy Saving Glass with Different Sheet Resistance Values. *Advanced Materials Research*, **2013**, 832, 233-236	0.5	1
29	Morphological and optical characteristics of porous silicon structure formed by electrochemical etching **2010**,		1
28	Study on the use of TiO2 passivation layer to reduce recombination losses in dye sensitized solar cells **2012**,		1
27	Annealing temperature induced improved crystallinity of YSZ thin film. *Materials Research Express*, **2020**, 7, 056406	1.7	1
26	Methodology for the Development of Interface Design Guidelines Based on Local Cultural Dimensions. *Communications in Computer and Information Science*, **2015**, 245-248	0.3	1
25	Influence of Various Target to Substrate Distances on the Structural and Optical Properties of Sputtered Gd-Doped ZnO Thin Films. *Solid State Phenomena*,317, 471-476	0.4	1
24	Metamorphosis of the ZnO buffer layer thicknesses on the performance of inverted organic solar cells. *Journal of Materials Science: Materials in Electronics*, **2016**, 27, 12891-12902	2.1	1
23	Non-Polar Gallium Nitride for Photodetection Applications: A Systematic Review. *Coatings*, **2022**, 12, 275	2.9	1

22	Initial User Requirement Analysis for Waterbodies Data Visualization. *Lecture Notes in Computer Science*, **2015**, 89-98	0.9	0
21	Influence of Different Solvents on the Formation of Uniform Titanium Dioxide (TiO2) Thin Film by Sol-Gel. *Applied Mechanics and Materials*, **2015**, 773-774, 667-671	0.3	0
20	Influence of Oxygen Flow Rate on the Characteristics of the Tungsten Oxide Using RF Magnetron Sputtering. *Applied Mechanics and Materials*, **2015**, 773-774, 657-661	0.3	0
19	Influence of Substrate Rotational Speed on the Structural and Optical Properties of Sputtered Gd-Doped ZnO Thin Films. *Materials Science Forum*,1023, 3-8	0.4	0
18	Enhancement of spin Seebeck effect of reverse spin crossover Fe (II) micellar charge transport using PMMA polymer electrolyte. *Applied Organometallic Chemistry*, **2021**, 35, e6268	3.1	0
17	Absolute densities of Cu, Zn, Sn, and S atoms in magnetron sputtering plasmas employing a Cu2ZnSnS4target. *Japanese Journal of Applied Physics*, **2016**, 55, 07LC02	1.4	0
16	2D and 3D Analyses of Metal Oxide Thin Films Examined by Atomic Force Microscope. *Applied Mechanics and Materials*, **2015**, 773-774, 716-719	0.3	
15	Derivation of GdxZn1-xO Film: The Effects of Gd Concentration on the Structural, Morphological and Optical Properties. *Applied Mechanics and Materials*, **2015**, 773-774, 686-690	0.3	
14	Fabrication of Intrinsic Zinc Oxide-Coated, Aluminium-Doped Zinc Oxide Nanorod Array-Based Ultraviolet Photoconductive Sensors. *Applied Mechanics and Materials*, **2015**, 773-774, 696-700	0.3	
13	Direct Growth of Copper(II) Oxide (CuO) Nanostructures Films via One-Step Chemical Bath Deposition by pH Variation. *Applied Mechanics and Materials*, **2015**, 773-774, 637-641	0.3	
12	Hardware and circuit design of a vibrational cleaner. *IOP Conference Series: Materials Science and Engineering*, **2016**, 160, 012085	0.4	
11	Effects of Annealing Process on the Structural, Optical and Electrical Properties of Copper Oxide Thin Films Grown by Immersion Technique. *Advanced Materials Research*, **2016**, 1133, 439-443	0.5	
10	Development of a Microdilution Device with One-step Dilution of Cytochalasin-B for Treating ORL-48 Cancer Microtissues. *Biotechnology and Bioprocess Engineering*, **2019**, 24, 761-772	3.1	
9	Electron and Ion Densities Measurement in Reactive Magnetron Zinc Sputtering Plasma. *Advanced Materials Research*, **2013**, 832, 344-349	0.5	
8	Conductivity of Yittria-Stabilized Zirconia Nanostructure Electrolyte for Solid Oxide Fuel Cell Application by Using RF Magnetron Sputtering. *Solid State Phenomena*, **2017**, 268, 352-357	0.4	
7	Influence of Polyaniline Coated Kenaf Fiber on Kenaf Paper Sheet. *MATEC Web of Conferences*, **2015**, 27, 01002	0.3	
6	Surface Morphology and Electrical Properties of Al:ZnO Films Deposited by Spin Coating Process. *Advanced Materials Research*, **2014**, 925, 416-419	0.5	
5	Influence of Dissipation Power in Copper Sputtering Plasma Measured by Optical Emission Spectroscopy. *Advanced Materials Research*, **2013**, 832, 243-247	0.5	

4	Investigation of Stress and Electrical Properties of Air-Annealed and Oxygen-Annealed Aluminium-Doped Zinc Oxide Nanorod Arrays. *Advanced Materials Research*, **2013**, 832, 303-309	0.5
3	The investigation of chlorpyrifos (Cpy) detection of PEDOT:PSS-MXene(Ti2CTX)-BSA-GO composite using P-ISFET reduction method. *Polymer Bulletin*,1	2.4
2	The effect of deposition time on the properties of titanium dioxide thin film prepared using CVD. *IOP Conference Series: Materials Science and Engineering*,982, 012064	0.4
1	Investigation on the Structural and Electrical Properties of ZnO Thin Films Co-Doped with Rare Earth Gd and Al Prepared by Co-Sputtering Method. *Materials Science Forum*,1053, 143-147	0.4