

Ziyad A Alrowaili

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

1,652
citations

257101

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docs citations

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times ranked

544
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental evaluation of fracture properties of bovine hip cortical bone using elastic-plastic fracture mechanics. <i>Bio-Medical Materials and Engineering</i> , 2022, 33, 91-99.	0.4	1
2	Investigation of the magnetocaloric effect and the critical behavior of the interacting superparamagnetic nanoparticles of La _{0.8} Sr _{0.15} Na _{0.05} MnO ₃ . <i>Journal of Alloys and Compounds</i> , 2022, 890, 161739.	2.8	10
3	Zn-Bi ₂ O ₃ nanopowders: Fabrication, structural, optical, and radiation shielding properties. <i>Ceramics International</i> , 2022, 48, 3464-3472.	2.3	49
4	Synthesis, physical, optical, structural and radiation shielding characterization of borate glasses: A focus on the role of SrO/Al ₂ O ₃ substitution. <i>Ceramics International</i> , 2022, 48, 2124-2137.	2.3	37
5	Determining the optical properties and simulating the radiation shielding parameters of Dy ³⁺ doped lithium yttrium borate glasses. <i>Optik</i> , 2022, 250, 168318.	1.4	31
6	Optical properties and radiation shielding performance of tellurite glasses containing Li ₂ O and MoO ₃ . <i>Optik</i> , 2022, 249, 168257.	1.4	65
7	The impact of Fe ₂ O ₃ on the dispersion parameters and gamma/fast neutron shielding characteristics of lithium borosilicate glasses. <i>Optik</i> , 2022, 249, 168259.	1.4	50
8	Fully-developed laminar flow in trapezoidal ducts with rounded corners: a numerical solution and case study. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2022, 32, 2682-2699.	1.6	1
9	Optical and radiation shielding effectiveness of a newly fabricated WO ₃ doped TeO ₂ -B ₂ O ₃ glass system. <i>Radiation Physics and Chemistry</i> , 2022, 193, 109968.	1.4	76
10	DFT study of 2D graphitic carbon nitride based preferential targeted delivery of levosimendan, a cardiovascular drug. <i>Computational and Theoretical Chemistry</i> , 2022, 1209, 113584.	1.1	6
11	Bipyridine-based polybenzimidazole as a nitrogen-rich ionomer and a platinum nanoparticle support for enhanced fuel cell performance. <i>Fuel</i> , 2022, 312, 122954.	3.4	2
12	Environmentally compatible and highly improved hole transport materials (HTMs) based on benzotrithiophene (BTT) skeleton for perovskite as well as narrow bandgap donors for organic solar cells. <i>Solar Energy</i> , 2022, 231, 793-808.	2.9	56
13	High density binary TeO ₂ -Bi ₂ O ₃ glasses: strong potential as a nontoxic and environmentally friendly glass shields for photons/charged particles. <i>Journal of Materials Research and Technology</i> , 2022, 17, 1311-1318.	2.6	7
14	Physical, optical, and radiation characteristics of bioactive glasses for dental prosthetics and orthopaedic implants applications. <i>Radiation Physics and Chemistry</i> , 2022, 193, 109995.	1.4	31
15	Estimation of radiation protection ability of borate glass system doped with CdO, PbO, and TeO ₂ . <i>Radiation Physics and Chemistry</i> , 2022, 193, 109996.	1.4	21
16	Significant influence of Cu content on the radiation shielding properties of Ge-Se-Te bulk glasses. <i>Radiation Physics and Chemistry</i> , 2022, 193, 109981.	1.4	20
17	The influential role of ITO heat treatment on improving the performance of solar cell n-ITO/p-Si junction: Structural, optical, and electrical characterizations. <i>Materials Today Communications</i> , 2022, 31, 103272.	0.9	2
18	Sapphire irradiation by phosphorus as an approach to improve its optical properties. <i>Open Physics</i> , 2022, 20, 202-207.	0.8	0

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19	Optical and spectroscopic behavior of Eu ³⁺ doped heavy metal phosphate glasses. <i>Ceramics International</i> , 2022, 48, 19424-19433.	2.3	15
20	Development and Characterization of Gentamicin-Loaded Arabinoxylan-Sodium Alginate Films as Antibacterial Wound Dressing. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2899.	1.8	16
21	Synthesis and properties of tellurite based glasses containing Na ₂ O, BaO, and TiO ₂ : Raman, UV and neutron/charged particle shielding assessments. <i>Ceramics International</i> , 2022, 48, 18330-18337.	2.3	15
22	Structural and Optical Properties of Calcium Titanate Prepared from Gypsum. <i>Journal of Nanotechnology</i> , 2022, 2022, 1-9.	1.5	2
23	Designing phenyl-di-p-tolyl-amine-based asymmetric small molecular donor materials with favorable photovoltaic parameters. <i>Optik</i> , 2022, 256, 168739.	1.4	9
24	Quantum chemical study of end-capped acceptor and bridge on triphenyl diamine based molecules to enhance the optoelectronic properties of organic solar cells. <i>Polymer</i> , 2022, 245, 124675.	1.8	26
25	Effect of Nb ₂ O ₅ inclusion on the radiation shielding efficiency of TeO ₂ -ZnO-LiF-NaF glass system. <i>Radiation Physics and Chemistry</i> , 2022, 196, 110127.	1.4	14
26	Influence of iron (III) oxide on the optical, mechanical, physical, and radiation shielding properties of sodium-barium-vanadate glass system. <i>Optik</i> , 2022, 257, 168844.	1.4	11
27	Optical and radiation shielding studies on tellurite glass system containing ZnO and Na ₂ O. <i>Optik</i> , 2022, 257, 168821.	1.4	19
28	Optical properties and radiation shielding competence of Bi/Te-BGe glass system containing B ₂ O ₃ and GeO ₂ . <i>Optik</i> , 2022, 257, 168883.	1.4	12
29	Nuclear shielding characteristics of Sm ³⁺ doped borosilicate glasses containing Na ₂ O, PbO and ZnO. <i>Radiation Physics and Chemistry</i> , 2022, 194, 110044.	1.4	20
30	Fabrication, optical and radiation shielding properties of BaO-TeO ₂ -B ₂ O ₃ -Cr ₂ O ₃ glass system. <i>Optik</i> , 2022, 258, 168877.	1.4	42
31	Nuclear shielding properties of Ni-, Fe-, Pb-, and W-based alloys. <i>Radiation Physics and Chemistry</i> , 2022, 195, 110090.	1.4	60
32	CdSe supported SnO ₂ nanocomposite with strongly hydrophilic surface for enhanced overall water splitting. <i>Fuel</i> , 2022, 321, 124086.	3.4	47
33	Wet-chemical synthesis of urchin-like Co-doped CuO: A visible light trigger photocatalyst for water remediation and antimicrobial applications. <i>Ceramics International</i> , 2022, 48, 21763-21772.	2.3	22
34	Synthesis, optical properties and radiation shielding performance of TeO ₂ -Na ₂ O-BaO-WO ₃ glass system. <i>Optik</i> , 2022, 261, 169167.	1.4	12
35	A synergistic effect of heavy metal oxides to enhance the physical, optical, and radiation-absorption properties of TeO ₂ -Li ₂ O-BaO glasses. <i>Optik</i> , 2022, 261, 169189.	1.4	16
36	Holmium(III) oxide and its significant effects on the radiation shielding performance of P ₂ O ₅ + B ₂ O ₃ + ZnSO ₄ optical glasses. <i>Optik</i> , 2022, 261, 169188.	1.4	20

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37	A theoretical study on the radiation shielding performance of borate and tellurite glasses. Solid State Sciences, 2022, 129, 106902.	1.5	12
38	Optical properties and photon-shielding performance of B ₂ O ₃ -based glasses. Optik, 2022, 264, 169343.	1.4	6
39	Mechanical, optical, and gamma-attenuation properties of a newly developed tellurite glass system. Optik, 2022, 266, 169355.	1.4	3
40	Dynamic models for air-breathing and conventional polymer electrolyte fuel cells: A comparative study. Renewable Energy, 2022, 195, 1001-1014.	4.3	4
41	Influence of Fe ₂ O ₃ content on the optical features and radiation shielding efficiency of CaO-Na ₂ O-B ₂ O ₃ glass system. Optik, 2022, 265, 169473.	1.4	18
42	Optical properties, elastic moduli, and radiation shielding performance of some waste glass systems treated by bismuth oxide. Optik, 2022, 266, 169567.	1.4	21
43	Optical borophosphate glass system with excellent properties for radiation shielding applications. Optik, 2022, 266, 169568.	1.4	20
44	Novel green synthesis of hydroxyapatite uniform nanorods via microwave-hydrothermal route using licorice root extract as template. Ceramics International, 2021, 47, 3928-3937.	2.3	33
45	Machine Learning Enabled Early Detection of Breast Cancer by Structural Analysis of Mammograms. Computers, Materials and Continua, 2021, 67, 641-657.	1.5	34
46	Antibiotic-Loaded Psyllium Husk Hemicellulose and Gelatin-Based Polymeric Films for Wound Dressing Application. Pharmaceutics, 2021, 13, 236.	2.0	15
47	Synthesis of an optimized ZnS/Au/ZnS multilayer films for solar cell electrode applications. Optical Materials, 2021, 113, 110814.	1.7	9
48	The significant role of CeO ₂ content on the radiation shielding performance of Fe ₂ O ₃ -P ₂ O ₅ glass-ceramics: Geant4 simulations study. Physica Scripta, 2021, 96, 115305.	1.2	11
49	Structure and AC electrical characterization for amorphous Se ₅₀ Te ₅₀ thin-film fabricated by thermal evaporation technique. Physica B: Condensed Matter, 2021, 612, 412975.	1.3	13
50	Robust Adaptive HCS MPPT Algorithm-Based Wind Generation System Using Model Reference Adaptive Control. Sensors, 2021, 21, 5187.	2.1	9
51	Evaluation of Radiation Doses from Computed Tomography Conducted in Al Jouf Region (Saudi Arabia). Journal of Medical Imaging and Health Informatics, 2021, 11, 2194-2200.	0.2	0
52	Organic heterostructure modified carbon nitride as apprehension for Quercetin Biosensor. Synthetic Metals, 2021, 278, 116813.	2.1	30
53	Theoretical investigation of pressure sensing using a defect of polystyrene inside photonic crystals. Materials Chemistry and Physics, 2021, 270, 124853.	2.0	21
54	Fabrication of nanostructured NiO and NiO:Cu thin films for high-performance ultraviolet photodetector. Optical Materials, 2021, 120, 111387.	1.7	31

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55	Theoretical investigations of Tamm plasmon resonance for monitoring of isoprene traces in the exhaled breath: Towards chronic liver fibrosis disease biomarkers. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2021, 413, 127610.	0.9	23
56	Effects of TeO ₂ /B ₂ O ₃ substitution on synthesis, physical, optical and radiation shielding properties of ZnO–Li ₂ O–GeO ₂ –Bi ₂ O ₃ glasses. <i>Ceramics International</i> , 2021, 47, 30137-30146.	2.3	29
57	Significant influence of MoO ₃ content on synthesis, mechanical, and radiation shielding properties of B ₂ O ₃ -Pb ₃ O ₄ -Al ₂ O ₃ glasses. <i>Journal of Alloys and Compounds</i> , 2021, 882, 160625.	2.8	76
58	Nuclear shielding properties and buildup factors of Cr-based ferroalloys. <i>Progress in Nuclear Energy</i> , 2021, 141, 103956.	1.3	42
59	Boosting the catalytic efficiency of platinum nanoparticles supported on pristine carbon nanotubes: Synergistic effects of conducting polymers. <i>Fuel</i> , 2021, 306, 121681.	3.4	6
60	Ozone Depletion Identification in Stratosphere Through Faster Region-Based Convolutional Neural Network. <i>Computers, Materials and Continua</i> , 2021, 68, 2159-2178.	1.5	5
61	Klein–Nishina formula and Monte Carlo method for evaluating the gamma attenuation properties of Zn, Ba, Te and Bi elements. <i>Materials Science-Poland</i> , 2021, .	0.4	4
62	Synthesis, physical and nuclear shielding properties of novel Pb–Al alloys. <i>Progress in Nuclear Energy</i> , 2021, 142, 103992.	1.3	79
63	Design of mesoporous ZnO @ silica fume-derived SiO ₂ nanocomposite as photocatalyst for efficient crystal violet removal: Effective route to recycle industrial waste. <i>Journal of Cleaner Production</i> , 2021, 326, 129416.	4.6	32
64	Synthesis and characterization of B ₂ O ₃ -Ag ₃ PO ₄ -ZnO-Na ₂ O glasses for optical and radiation shielding applications. <i>Optik</i> , 2021, 248, 168199.	1.4	48
65	The Influence of CoO/P ₂ O ₅ Substitutions on the Structural, Mechanical, and Radiation Shielding of Boro-Phosphate Glasses. <i>Materials</i> , 2021, 14, 6632.	1.3	3
66	Study of the influence of MoO ₃ concentration on the chemical structure, physical properties, and radiation absorption prowess of alumino lead borate glasses. <i>Physica Scripta</i> , 2021, 96, 125325.	1.2	4
67	Design of a low-cost laser CUT-OFF filters using carmine dye-doped PVA polymeric composite films. <i>Results in Physics</i> , 2020, 18, 103203.	2.0	17
68	Controlled growth of hexagonal nanocrystals Co and Gd co-doping ZnO by hydrothermal method. <i>Emerging Materials Research</i> , 2020, 9, 1032-1040.	0.4	1
69	Structure and optical properties of polycrystalline ZnSe thin films: validity of Swanepol's approach for calculating the optical parameters. <i>Materials Research Express</i> , 2020, 7, 016422.	0.8	41
70	MATLAB Image Treatment of Copper-Steel Laser Welding. <i>Advances in Materials Science and Engineering</i> , 2020, 2020, 1-13.	1.0	3
71	A Review of Chemotherapy and Photodynamic Therapy for Lung Cancer Treatment. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2020, 21, 149-161.	0.9	45
72	Spontaneous Magnetization Estimation and Magnetocaloric Effect Study by Means of Theoretical Models in La _{0.67} Pb _{0.33} MnO ₃ . <i>Journal of Superconductivity and Novel Magnetism</i> , 2019, 32, 1285-1291.	0.8	7

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73	Two-dimensional solid-state array detectors: A technique for <i>in vivo</i> dose verification in a variable effective area. <i>Journal of Applied Clinical Medical Physics</i> , 2019, 20, 88-94.	0.8	2
74	Investigations into the physical properties of SnO ₂ /MoO ₃ and SnO ₂ /WO ₃ bi-layered structures along with photocatalytic and antibacterial applications. <i>Thin Solid Films</i> , 2018, 648, 12-20.	0.8	28
75	Modeling the Magnetocaloric Effect of La _{0.67} Pb _{0.33} MnO ₃ by the Mean-Field Theory. <i>Journal of Superconductivity and Novel Magnetism</i> , 2018, 31, 3717-3722.	0.8	7
76	Impact of a monolithic silicon detector operating in transmission mode on clinical photon beams. <i>Physica Medica</i> , 2017, 43, 114-119.	0.4	3
77	Beam perturbation characteristics of a 2D transmission silicon diode array, Magic Plate. <i>Journal of Applied Clinical Medical Physics</i> , 2016, 17, 85-98.	0.8	8
78	2D mapping of the MV photon fluence and 3D dose reconstruction in real time for quality assurance during radiotherapy treatment. <i>Journal of Instrumentation</i> , 2015, 10, P09019-P09019.	0.5	6