

Ziyad A Alrowaili

List of Publications by Year in descending order

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78
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257450

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#	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.	0.6	1
2	Investigation of the magnetocaloric effect and the critical behavior of the interacting superparamagnetic nanoparticles of $\text{La}_{0.8}\text{Sr}_{0.15}\text{Na}_{0.05}\text{MnO}_3$. <i>Journal of Alloys and Compounds</i> , 2022, 890, 161739.	5.5	10
3	Zn-Bi 2O_3 nanopowders: Fabrication, structural, optical, and radiation shielding properties. <i>Ceramics International</i> , 2022, 48, 3464-3472.	4.8	49
4	Synthesis, physical, optical, structural and radiation shielding characterization of borate glasses: A focus on the role of SrO/Al 2O_3 substitution. <i>Ceramics International</i> , 2022, 48, 2124-2137.	4.8	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.	2.9	31
6	Optical properties and radiation shielding performance of tellurite glasses containing Li 2O and MoO 3 . <i>Optik</i> , 2022, 249, 168257.	2.9	65
7	The impact of Fe 2O_3 on the dispersion parameters and gamma/fast neutron shielding characteristics of lithium borosilicate glasses. <i>Optik</i> , 2022, 249, 168259.	2.9	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.	2.8	1
9	Optical and radiation shielding effectiveness of a newly fabricated WO 3 doped TeO 2 -Bi 2O_3 glass system. <i>Radiation Physics and Chemistry</i> , 2022, 193, 109968.	2.8	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.	2.5	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.	6.4	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.	6.1	56
13	High density binary TeO 2 -Bi 2O_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.	5.8	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.	2.8	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.	2.8	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.	2.8	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.	1.9	2
18	Sapphire irradiation by phosphorus as an approach to improve its optical properties. <i>Open Physics</i> , 2022, 20, 202-207.	1.7	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.	4.8	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.	4.1	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.	4.8	15
22	Structural and Optical Properties of Calcium Titanate Prepared from Gypsum. <i>Journal of Nanotechnology</i> , 2022, 2022, 1-9.	3.4	2
23	Designing phenyl-di-p-tolyl-amine-based asymmetric small molecular donor materials with favorable photovoltaic parameters. <i>Optik</i> , 2022, 256, 168739.	2.9	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.	3.8	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.	2.8	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.	2.9	11
27	Optical and radiation shielding studies on tellurite glass system containing ZnO and Na ₂ O. <i>Optik</i> , 2022, 257, 168821.	2.9	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.	2.9	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.	2.8	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.	2.9	42
31	Nuclear shielding properties of Ni-, Fe-, Pb-, and W-based alloys. <i>Radiation Physics and Chemistry</i> , 2022, 195, 110090.	2.8	60
32	CdSe supported SnO ₂ nanocomposite with strongly hydrophilic surface for enhanced overall water splitting. <i>Fuel</i> , 2022, 321, 124086.	6.4	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.	4.8	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.	2.9	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.	2.9	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.	2.9	20

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37	A theoretical study on the radiation shielding performance of borate and tellurite glasses. <i>Solid State Sciences</i> , 2022, 129, 106902.	3.2	12
38	Optical properties and photon-shielding performance of B ₂ O ₃ -based glasses. <i>Optik</i> , 2022, 264, 169343.	2.9	6
39	Mechanical, optical, and gamma-attenuation properties of a newly developed tellurite glass system. <i>Optik</i> , 2022, 266, 169355.	2.9	3
40	Dynamic models for air-breathing and conventional polymer electrolyte fuel cells: A comparative study. <i>Renewable Energy</i> , 2022, 195, 1001-1014.	8.9	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. <i>Optik</i> , 2022, 265, 169473.	2.9	18
42	Optical properties, elastic moduli, and radiation shielding performance of some waste glass systems treated by bismuth oxide. <i>Optik</i> , 2022, 266, 169567.	2.9	21
43	Optical borophosphate glass system with excellent properties for radiation shielding applications. <i>Optik</i> , 2022, 266, 169568.	2.9	20
44	Novel green synthesis of hydroxyapatite uniform nanorods via microwave-hydrothermal route using licorice root extract as template. <i>Ceramics International</i> , 2021, 47, 3928-3937.	4.8	33
45	Machine Learning Enabled Early Detection of Breast Cancer by Structural Analysis of Mammograms. <i>Computers, Materials and Continua</i> , 2021, 67, 641-657.	1.9	34
46	Antibiotic-Loaded Psyllium Husk Hemicellulose and Gelatin-Based Polymeric Films for Wound Dressing Application. <i>Pharmaceutics</i> , 2021, 13, 236.	4.5	15
47	Synthesis of an optimized ZnS/Au/ZnS multilayer films for solar cell electrode applications. <i>Optical Materials</i> , 2021, 113, 110814.	3.6	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. <i>Physica Scripta</i> , 2021, 96, 115305.	2.5	11
49	Structure and AC electrical characterization for amorphous Se ₅₀ Te ₅₀ thin-film fabricated by thermal evaporation technique. <i>Physica B: Condensed Matter</i> , 2021, 612, 412975.	2.7	13
50	Robust Adaptive HCS MPPT Algorithm-Based Wind Generation System Using Model Reference Adaptive Control. <i>Sensors</i> , 2021, 21, 5187.	3.8	9
51	Evaluation of Radiation Doses from Computed Tomography Conducted in Al Jouf Region (Saudi Arabia). <i>Journal of Medical Imaging and Health Informatics</i> , 2021, 11, 2194-2200.	0.3	0
52	Organic heterostructure modified carbon nitride as apprehension for Quercetin Biosensor. <i>Synthetic Metals</i> , 2021, 278, 116813.	3.9	30
53	Theoretical investigation of pressure sensing using a defect of polystyrene inside photonic crystals. <i>Materials Chemistry and Physics</i> , 2021, 270, 124853.	4.0	21
54	Fabrication of nanostructured NiO and NiO:Cu thin films for high-performance ultraviolet photodetector. <i>Optical Materials</i> , 2021, 120, 111387.	3.6	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.	2.1	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.	4.8	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.	5.5	76
58	Nuclear shielding properties and buildup factors of Cr-based ferroalloys. <i>Progress in Nuclear Energy</i> , 2021, 141, 103956.	2.9	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.	6.4	6
60	Ozone Depletion Identification in Stratosphere Through Faster Region-Based Convolutional Neural Network. <i>Computers, Materials and Continua</i> , 2021, 68, 2159-2178.	1.9	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, .	1.0	4
62	Synthesis, physical and nuclear shielding properties of novel Pb–Al alloys. <i>Progress in Nuclear Energy</i> , 2021, 142, 103992.	2.9	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.	9.3	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.	2.9	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.	2.9	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.	2.5	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.	4.1	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.	0.7	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.	1.6	41
70	MATLAB Image Treatment of Copper-Steel Laser Welding. <i>Advances in Materials Science and Engineering</i> , 2020, 2020, 1-13.	1.8	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.	1.7	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.	1.8	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.	1.9	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.	1.8	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.	1.8	7
76	Impact of a monolithic silicon detector operating in transmission mode on clinical photon beams. <i>Physica Medica</i> , 2017, 43, 114-119.	0.7	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.	1.9	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.	1.2	6