Mohammed Al-Buriahi

List of Publications by Year
in descending order

105 papers	3,696 citations	81889 39 h-index	144002 57 g-index
108 all docs	108 docs citations	108 times ranked	593 citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Nd3+ ions on radiation attenuation properties of PbF2â€“TeO2â€“WO3 glass system for shielding applications. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2022, 61, 470-486.	1.9	14
2	Spectroscopic and Attenuation Shielding Studies on B2O3-SiO2-LiF- ZnO-TiO2 Glasses. Silicon, 2022, 14, 3091-3100.	3.3	61
3	Synthesis of Pb3O4-SiO2-ZnO-WO3 Glasses and their Fundamental Properties for Gamma Shielding Applications. Silicon, 2022, 14, 5661-5671.	3.3	38
4	A Study of Thermal, and Optical Properties of 22SiO2- 23Bi2O3-37B2O3-13TiO2-(5-x) LiF- x BaO Glasses. Silicon, 2022, 14, 6447-6455.	3.3	27
5	Mechanical and Thermodynamic Characteristics of 22SiO2- 23Bi2O3-37B2O3-13TiO2-(5-x) LiF- x BaO Glasses. Silicon, 2022, 14, 6457-6465.	3.3	38
6	FT-IR and Gamma Shielding Characteristics of 22SiO2- 23Bi2O3-37B2O3-13TiO2-(5-x) LiF- x BaO Glasses. Silicon, 2022, 14, 7043-7051.	3.3	40
7	Study of the radiation attenuation properties of MgO-Al2O3-SiO2-Li2O-Na2O glass system. Journal of the Australian Ceramic Society, 2022, 58, 267-273.	1.9	45
8	The role of PbF2 on the gamma-ray photon, charged particles, and neutron shielding prowess of novel lead fluoro bismuth borate glasses. Journal of Materials Science: Materials in Electronics, 2022, 33, 1123-1139.	2.2	46
9	Characterization of physicochemical properties of As2Se3â€“GeTeâ€“AgI chalcohalide glasses for solar cell and IR applications: influence of adding AgI. Journal of Materials Science: Materials in Electronics, 2022, 33, 800.	2.2	4
10	A significant role of MoO3 on the optical, thermal, and radiation shielding characteristics of B2O3â€“P2O5â€“Li2O glasses. Optical and Quantum Electronics, 2022, 54, 1.	3.3	77
11	An important role of Ba2+, Sr2+, Mg2+, and Zn2+ in the radiation attenuation performance of CFCBPC bioactive glasses. Journal of the Australian Ceramic Society, 2022, 58, 461-473.	1.9	42
12	Effect of Calcination Temperature on the Structural and Optical Properties of (ZnO)0.8 (ZrO2)0.2 Nanoparticles. Journal of Inorganic and Organometallic Polymers and Materials, 2022, 32, 1755-1765.	3.7	7
13	Drug delivery of carvedilol (cardiovascular drug) using phosphorene as a drug carrier: a DFT study. Journal of Taibah University for Science, 2022, 16, 31-46.	2.5	14
14	Attenuation properties and radiation protection efficiency of Tb2O3-La2O3-P2O5 glass system. Journal of the Australian Ceramic Society, 2022, 58, 511-519.	1.9	18
15	Gamma, neutron, and heavy charged ion shielding properties of Er³⁺-doped and Sm³⁺-doped zinc borate glasses. Open Chemistry, 2022, 20, 130-145.	1.9	38
16	Silver cluster doped graphyne (GY) with outstanding non-linear optical properties. RSC Advances, 2022, 12, 5466-5482.	3.6	29
17	Non-woven fabric coated with candle soot for water remediation. Journal of the Australian Ceramic Society, 2022, 58, 617-625.	1.9	1
18	Comparison of radiation shielding and elastic properties of germinate tellurite glasses with the addition of Ga₂O₃. Journal of Taibah University for Science, 2022, 16, 183-192.	2.5	25

#	ARTICLE	IF	CITATIONS
19	Enhanced Î±-Mn2O3 nanorods synthesized by one-pot hydrothermal route for supercapacitors. Journal of Materials Science: Materials in Electronics, 2022, 33, 11067-11077.	2.2	4
20	Structural, Electronic, Elastic and Magnetic Properties of Ln3QIn (Ln = Ce, Pr and Nd; Q = C and N) anti-perovskites. Journal of Electronic Materials, 2022, 51, 2819-2827.	2.2	3
21	Synthesis, thermal, optical, mechanical and radiation-attenuation characteristics of borate glass system modified by Bi2O3/MgO. Applied Physics A: Materials Science and Processing, 2022, 128, .	2.3	43
22	Simultaneously enhanced efficiency of eco-friendly structural characterization of the dithienocyclopentacarbazole donor based acceptors with narrow bandgap for high-performance organic solar cells. Journal Physics D: Applied Physics, 2022, 55, 235501.	2.8	26
23	Photocatalytic activity of hierarchical CTAB-assisted TiO2 nanoparticles for polluted water treatment using solar light illumination. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	8
24	Sonophotocatalytic Dye Degradation Using rGOâ€BiVO₄ Composites. Global Challenges, 2022, 6, .	3.6	16
25	Evaluation of the radiation shielding characteristics of WO₃â€“MoO₃â€“TeO₂/Sb₂O₃ glasses. Canadian Metallurgical Quarterly, 2022, 61, 418-428.	1.2	9
26	Rational design of a BiFeWO6 nanostructure for supercapacitor applications. Journal of Solid State Electrochemistry, 2022, 26, 1251-1258.	2.5	3
27	Euâ€“Co substituted Sr-hexaferrites for recording media and microwave devices. Journal of Materials Science: Materials in Electronics, 2022, 33, 12147-12156.	2.2	5
28	Fabrication and characterization of Th(MoO4)2/TiO2 nanocomposite for potential use in photocatalytic degradation of toxic pollutants. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	7
29	First principle study of opto-electronic and thermoelectric properties of Zintl Phase XIn2Z2 (Xâ€‰=â€‰Ca, Sr) Tj ETQq1 1 0.784314 r	2.3	8
30	CoFe2O4 surface modification with conducting polypyrrole: employed as a highly active electrocatalyst for oxygen evolution reaction. Journal of Materials Science: Materials in Electronics, 2022, 33, 13244-13254.	2.2	6
31	Remarkable non-linear optical properties of gold cluster doped graphyne (GY): A DFT study. Journal of Molecular Graphics and Modelling, 2022, 114, 108204.	2.4	9
32	Single-step hydrothermal synthesis of amine functionalized Ce-MOF for electrochemical water splitting. Journal of Taibah University for Science, 2022, 16, 525-534.	2.5	1
33	Tunable decorated flake interlayers of functionalized graphene oxide for energy storage devices. Applied Physics A: Materials Science and Processing, 2022, 128, .	2.3	3
34	A broad analysis of directly and indirectly ionizing radiation interaction parameters of PbF₂-CaF₂-Bi₂O₃-B₂O₃-Cr₂O₃ glass system. Physica Scripta, 2022, 97, 075306.	2.5	2
35	P2O5â€“Pb3O4â€“ZnOâ€“Li2CO3â€“CuO glasses and their radiation attenuation properties for shielding applications. Journal of the Australian Ceramic Society, 2022, 58, 1219-1229.	1.9	3
36	Radiation shielding performance of Co2O3â€“TeO2â€“Li2Oâ€“ZrO2 glassâ€“ceramics. Journal of the Australian Ceramic Society, 2022, 58, 1199-1207.	1.9	7

#	Article	IF	Citations
37	<i>n</i>-Type narrow band gap A₃InAs₃ (Aâ€‰=â€‰Sr and Eu) Zintl phase semiconductors for optoelectronic and thermoelectric applications. Journal of Taibah University for Science, 2022, 16, 660-669.	2.5	10
38	Polarizability, Optical Basicity, and Photon Attenuation Properties of Ag2Oâ€“MoO3â€“V2O5â€“TeO2 Glasses: The Role of Silver Oxide. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 1047-1056.	3.7	74
39	Electrical and dielectric properties of meridional and facial Alq3 nanorods powders. Journal of Materials Science: Materials in Electronics, 2021, 32, 2075-2087.	2.2	21
40	Effects of AgO addition on the mechanical, optical, and radiation attenuation properties of V2O5/P2O5/B2O3 glass system. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	11
41	13-93B3 Bioactive glasses containing Ce3+, Ga3+ and V5+: dose rate and gamma radiation characteristic for medical purposes. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	9
42	Radiation attenuation properties of some commercial polymers for advanced shielding applications at low energies. Polymers for Advanced Technologies, 2021, 32, 2386-2396.	3.2	118
43	Fe-based alloys and their shielding properties against directly and indirectly ionizing radiation by using FLUKA simulations. Physica Scripta, 2021, 96, 045303.	2.5	64
44	The Effects of TeO2 on Polarizability, Optical Transmission, and Photon/Neutron Attenuation Properties of Boro-Zinc-Tellurite Glasses. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 2331-2338.	3.7	69
45	Structural, optical and nuclear radiation shielding properties of strontium barium borate glasses doped with dysprosium and niobium. Journal of Materials Science: Materials in Electronics, 2021, 32, 8570-8592.	2.2	60
46	Newly developed glasses containing Si/Cd/Li/Gd and their high performance for radiation applications: role of Er2O3. Journal of Materials Science: Materials in Electronics, 2021, 32, 9440-9451.	2.2	55
47	Microâ€hardness and gammaâ€ray attenuation properties of lead iron phosphate glasses. Journal of Materials Science: Materials in Electronics, 2021, 32, 13906-13916.	2.2	51
48	Role of heavy metal oxides on the radiation attenuation properties of newly developed TBBE-X glasses by computational methods. Physica Scripta, 2021, 96, 075302.	2.5	55
49	Optical, thermal and radiation shielding properties of B2O3â€“NaFâ€“PbOâ€“BaOâ€“La2O3 glasses. Journal of Materials Science: Materials in Electronics, 2021, 32, 26034-26048.	2.2	57
50	Effect of Ag₂O/V₂O₅ substitution on the radiation shielding ability of tellurite glass system via XCOM approach and FLUKA simulations. Physica Scripta, 2021, 96, 065308.	2.5	84
51	Structural, Magnetic and Gas Sensing Activity of Pure and Cr Doped In2O3 Thin Films Grown by Pulsed Laser Deposition. Coatings, 2021, 11, 588.	2.6	13
52	Ge20Se80-xBix (xâ€‰â‰â€‰12) chalcogenide glasses for infrared and gamma sensing applications: structural, optical and gamma attenuation aspects. Journal of Materials Science: Materials in Electronics, 2021, 32, 15509-15522.	2.2	28
53	Effects of MgO addition on the radiation attenuation properties of 45S5 bioglass system at the energies of medical interest: an in silico study. Journal of the Australian Ceramic Society, 2021, 57, 1107-1115.	1.9	31
54	Erbium (III)- and Terbium (III)-containing silicate-based bioactive glass powders: physical, structural and nuclear radiation shielding characteristics. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	18

#	Article	IF	Citations
55	Effects of reducing PbO content on the elastic and radiation attenuation properties of germanate glasses: a new nonâ€toxic candidate for shielding applications. Journal of Materials Science: Materials in Electronics, 2021, 32, 15080-15094.	2.2	11
56	Effects of TeO2 and B2O3 on photon, neutron, and charged particle transmission properties of Bi2O3-BaO-LiF glass system. Journal of the Australian Ceramic Society, 2021, 57, 1177-1188.	1.9	22
57	Electronegativity and optical basicity of glasses containing Na/Pb/B and their high performance for radiation applications: role of ZrO2 nanoparticles. European Physical Journal Plus, 2021, 136, 1.	2.6	26
58	Elastic properties and radiation shielding ability of ZnOâ€"P2O5/B2O3 glass system. Journal of Materials Science: Materials in Electronics, 2021, 32, 19203-19217.	2.2	23
59	A Significant Role of Tb2O3 on the Optical Properties and Radiation Shielding Performance of Ga2O3â€"B2O3â€"Al2O3â€"GeO2 Glasses. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 4300-4312.	3.7	8
60	The significant role of CeO₂ content on the radiation shielding performance of Fe₂O₃-P₂O₅ glass-ceramics: Geant4 simulations study. Physica Scripta, 2021, 96, 115305.	2.5	11
61	Physical, structural, mechanical, and radiation shielding properties of the PbOâ€"B2O3â€"Bi2O3â€"ZnO glass system. Journal of Materials Science: Materials in Electronics, 2021, 32, 18994-19009.	2.2	23
62	Influence of WO3 incorporation on synthesis, optical, elastic and radiation shielding properties of borosilicate glass system. European Physical Journal Plus, 2021, 136, 1.	2.6	47
63	X- and gamma-rays attenuation properties of DNA nucleobases by using FLUKA simulation code. European Physical Journal Plus, 2021, 136, 1.	2.6	31
64	Enhancement of shielding ability using PbF2 in Fe-reinforced bismuth borate glasses. Journal of Materials Science: Materials in Electronics, 2021, 32, 23047-23065.	2.2	21
65	Nuclear Radiation Shielding Characteristics of Some Natural Rocks by Using EPICS2017 Library. Materials, 2021, 14, 4669.	2.9	17
66	Polarizability, metallization criterion, and radiation attenuation performance of pure and Ag-doped poly (vinyl alcohol) polymers for advanced shielding applications. Journal of Polymer Research, 2021, 28, 1.	2.4	10
67	Synthesis, optical, and radiation attenuation properties of CaF2-TeO2-Na2B4O7-CuO glass system for advanced shielding applications. European Physical Journal Plus, 2021, 136, 1.	2.6	43
68	Effect of Sb2O3 addition on radiation attenuation properties of tellurite glasses containing V2O5 and Nb2O5. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	49
69	Physical, optical, and ionizing radiation shielding parameters of Al(PO3)3-doped PbOâ€"Bi2O3â€"B2O3 glass system. Journal of Materials Science: Materials in Electronics, 2021, 32, 27744-27761.	2.2	16
70	Gamma, neutron, and charged-particles shielding properties of tellurite glass system containing Sb2O3 and V2O5. Journal of Materials Science: Materials in Electronics, 2021, 32, 28275-28286.	2.2	14
71	SrO Effect on Photon/Particle Radiation Protection Characteristics of SrOâ€"PbOâ€"B2O3 Glasses. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 4546.	3.7	8
72	Structural, thermal, and mechanical characteristics of yttrium lithium borate glasses and glassâ€"ceramics. Journal of Materials Science: Materials in Electronics, 2021, 32, 28065-28075.	2.2	17

#	Article	IF	Citations
73	Optical and gamma-ray absorption features of newly developed P2O5âˆ’Ce2O3âˆ’La2O3 glass system. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	17
74	Structural and magnetic properties of erbium substituted spinel ferrites for microwave absorptions. Journal of Taibah University for Science, 2021, 15, 769-780.	2.5	4
75	Synergistic effect of reduced graphene oxide layers wrapped in polyaniline sheets to porous blades for boosted oxygen evolution reaction. Journal of Taibah University for Science, 2021, 15, 960-970.	2.5	7
76	The Evaluation of Structural, Electrical and Magnetic Properties of Samarium substituted Spinel Ferrites. Journal of Taibah University for Science, 2021, 15, 798-804.	2.5	2
77	Study of the influence of MoO₃ concentration on the chemical structure, physical properties, and radiation absorption prowess of alumino lead borate glasses. Physica Scripta, 2021, 96, 125325.	2.5	4
78	Mass attenuation coefficients, effective atomic numbers and electron densities of some contrast agents for computed tomography. Radiation Physics and Chemistry, 2020, 166, 108507.	2.8	88
79	Oxyfluoro-tellurite-zinc glasses and the nuclear-shielding ability under the substitution of AlF3 by ZnO. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	81
80	Investigation of barium borate glasses for radiation shielding applications. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	156
81	Experimental studies on the gamma photons-shielding competence of TeO2â€“PbOâ€“BaOâ€“Na2Oâ€“B2O3 glasses. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	58
82	$$hbox {TeO}_2{-}hbox {TiO}_2{-}hbox {ZnO}$$ glasses: potential use in radiation protection. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	4
83	Gamma-ray attenuation properties of some NLO materials: potential use in dosimetry. Radiation and Environmental Biophysics, 2020, 59, 145-150.	1.4	67
84	Influence of ZrO2 on gamma shielding properties of lead borate glasses. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	64
85	Effect of different modifier oxides on the synthesis, structural, optical, and gamma/beta shielding properties of bismuth lead borate glasses doped with europium. Journal of Materials Science: Materials in Electronics, 2020, 31, 21486-21501.	2.2	55
86	Influence of Er3+-doped ions on the linear/nonlinear optical characteristics and radiation shielding features of TeO2-ZnO-Er2O3 glasses. Journal of Materials Science: Materials in Electronics, 2020, 31, 21431-21443.	2.2	5
87	Effect of lead oxide on the optical properties and radiation shielding efficiency of antimony-sodium-tungsten glasses. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	33
88	Nuclear radiation shielding competences of barium-reinforced borosilicate glasses. Emerging Materials Research, 2020, 9, 1131-1144.	0.7	75
89	Gamma-ray/neutron shielding capacity and elastic moduli of MnOâ€“K2Oâ€“B2O3 glasses co-doped with Er3+ ions. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	3
90	Effect of chromium oxide on the physical, optical, and radiation shielding properties of lead sodium borate glasses. Journal of Non-Crystalline Solids, 2020, 544, 120171.	3.1	108

#	Article	IF	Citations
91	Gamma-ray shielding parameters of lithium borotellurite glasses using Geant4 code. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	15
92	Bioactive glasses doped with TiO2 and their potential use in radiation shielding applications. Ceramics International, 2020, 46, 14721-14732.	4.8	41
93	Effect of TiO2/V2O5 substitution on the optical and radiation shielding properties of alkali borate glasses: A Monte Carlo investigation. Ceramics International, 2020, 46, 25671-25677.	4.8	27
94	Comparison of shielding properties of various marble concretes using GEANT4 simulation and experimental data. Journal of the Australian Ceramic Society, 2020, 56, 1127-1133.	1.9	83
95	Estimation of gamma-rays, and fast and the thermal neutrons attenuation characteristics for bismuth tellurite and bismuth boro-tellurite glass systems. Journal of Materials Science, 2020, 55, 5750-5771.	3.7	60
96	B2O3â€“Bi2O3â€“TeO2â€“BaO and TeO2â€“Bi2O3â€“BaO glass systems: a comparative assessment of gamma-ray and fast and thermal neutron attenuation aspects. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	69
97	MoO₃-TeO₂ glass system for gamma ray shielding applications. Materials Research Express, 2020, 7, 025202.	1.6	60
98	Study on gamma-ray buildup factors of bismuth borate glasses. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	93
99	Radiation shielding investigations for selected tellurite-based glasses belonging to the TNW system. Materials Research Express, 2019, 6, 105206.	1.6	100
100	Electronic polarizability, dielectric, and gamma-ray shielding properties of some tellurite-based glasses. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	93
101	Investigation of the physical properties and gamma-ray shielding capability of borate glasses containing PbO, Al2O3 and Na2O. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	77
102	Investigation of photon energy absorption properties for some biomolecules. Nuclear Science and Techniques/Hewuli, 2019, 30, 1.	3.4	25
103	New transparent rare earth glasses for radiation protection applications. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	67
104	Studies on mass attenuation coefficients, effective atomic numbers and electron densities for some biomolecules. Radiation Physics and Chemistry, 2018, 153, 86-91.	2.8	100
105	Production of charged hadrons in muon deep inelastic scattering. Chinese Journal of Physics, 2016, 54, 802-809.	3.9	1