

1. Obtain solutions to environmental problems in Al Jouf region.

- **To improve water supply capacity, quality and reliability**
- **Reducing of natural and artificial Radiation pollution**
- **Recycling agricultural wastes and ways of utilizing them**
- **Conservation of Biological Diversity in Saudi Arabia**

Article Title	DOI	Category Rank
An extended assessment of natural radioactivity in the sediments of the mid-region of the Egyptian Red Sea coast	DOI10.1016/j.marpolbul.2021.112658	Q1
Characterization of synthesized $x\text{BaO}-(40-x)\text{Li}_2\text{O}-60\text{B}_2\text{O}_3$ glass system: a multi-dimensional research on optical and physical properties	10.1007/s10854-021-06265-y	Q3
Comparison of different adsorption pairs based on zeotropic and azeotropic mixture refrigerants for solar adsorption ice maker	https://doi.org/10.1007/s11356-021-13535-z	Q2
$\text{PbO}-\text{Sb}_2\text{O}_3-\text{B}_2\text{O}_3-\text{CuO}$ glassy system: Evaluation of optical, gamma and neutron shielding properties	https://doi.org/10.1016/j.matchemphys.2020.123937	Q2
Tailoring the structuralism in $x\text{BaO}\cdot(30-x)\text{Li}_2\text{O}\cdot70\text{B}_2\text{O}_3$ glasses for highly efficient shields of Gamma radiation and neutrons attenuators	https://doi.org/10.1088/1402-4896/ac297b	Q2
Antibiotic-Loaded Psyllium Husk Hemicellulose and Gelatin-Based Polymeric Films for Wound Dressing Application	https://doi.org/10.3390/pharmaceutics13020236	Q1
Theoretical and Experimental Parameters of the Structure and Crystallization Kinetics of Melt-Quenched $\text{As}_{30}\text{Te}_{64}\text{Ga}_6$ Glassy Alloy	https://doi.org/10.1007/s10904-021-01938-x	Q2
Boosting the catalytic efficiency of platinum nanoparticles supported on	https://doi-org.sdl.idm.oclc.org/10.1016/j.fuel.2021.121681	Q1

pristine carbon nanotubes: Synergistic effects of conducting polymers		
Fully-developed laminar flow in trapezoidal ducts with rounded corners: a numerical solution and case study	https://www.emerald.com/insight/0961-5539.htm	Q1
A Significant Role of Tb ₂ O ₃ on the Optical Properties and Radiation Shielding Performance of Ga ₂ O ₃ - B ₂ O ₃ -Al ₂ O ₃ -GeO ₂ Glasses	https://doi-org.sdl.idm.oclc.org/10.1007/s10904-021-02040-y	Q2
A Study of Thermal, and Optical Properties of 22SiO(2)-23Bi(2)O(3)- 37B(2)O3-13TiO(2)-(5-x) LiF- x BaO Glasses	https://doi-org.sdl.idm.oclc.org/10.1007/s12633-021-01440-6	Q3
Characterization of physicochemical properties of As ₂ Se ₃ -GeTe-AgI chalcogenide glasses for solar cell and IR applications: influence of adding AgI	https://doi-org.sdl.idm.oclc.org/10.1007/s10854-021-07350-y	Q3
Effects of Nd ₂ O ₃ substitution on the mechanical and radiation shielding properties of alumino-borobismuthate glasses	DOI10.1140/epjp/s13360-021-01421-z	Q1
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	https://doi-org.sdl.idm.oclc.org/10.1016/j.ceramint.2021.07.192	Q1
Elastic properties and radiation shielding ability of ZnO-P ₂ O ₅ /B ₂ O ₃ glass system	https://doi-org.sdl.idm.oclc.org/10.1007/s10854-021-06442-z	Q3
Fabrication of nanostructured NiO and NiO:Cu thin films for high- performance ultraviolet photodetector	https://doi-org.sdl.idm.oclc.org/10.1016/j.optmat.2021.111387	Q3
FT-IR and Gamma Shielding Characteristics of 22SiO(2)- 23Bi(2)O(3)-37B(2)O3- 13TiO(2)-(5-x) LiF- x BaO Glasses	https://doi-org.sdl.idm.oclc.org/10.1007/s12633-021-01481-x	Q3

Gamma, neutron, and charged-particles shielding properties of tellurite glass system containing Sb ₂ O ₃ and V ₂ O ₅	https://doi-org.sdl.idm.oclc.org/10.1007/s10854-021-07204-7	Q3
Investigation of the structure and radiation shielding properties of borate/Y ₂ O ₃ glasses	https://doi-org.sdl.idm.oclc.org/10.1140/epjp/s13360-021-01565-y	Q1
Machine Learning Enabled Early Detection of Breast Cancer by Structural Analysis of Mammograms	https://www.techscience.com/cmc/v67n1/41171	Q2
Mechanical and Thermodynamic Characteristics of 22SiO(2)-23Bi(2)O(3)-37B(2)O3-13TiO(2)-(5-x) LiF- x BaO Glasses	https://doi-org.sdl.idm.oclc.org/10.1007/s12633-021-01441-5	Q3
Nuclear shielding properties and buildup factors of Cr-based ferroalloys	https://doi-org.sdl.idm.oclc.org/10.1016/j.pnucene.2021.103956	Q1
Organic heterostructure modified carbon nitride as apprehension for Quercetin Biosensor	https://doi-org.sdl.idm.oclc.org/10.1016/j.synthmet.2021.116813	Q2
Phosphate, phosphoric acid and phosphogypsum natural radioactivity and radiological hazards parameters	https://doi-org.sdl.idm.oclc.org/10.1007/s10967-021-07842-5	Q3
Robust Adaptive HCS MPPT Algorithm-Based Wind Generation System Using Model Reference Adaptive Control	https://doi.org/10.3390/s21155187	Q1
Significant Enhanced Optical Parameters of PVA-Y ₂ O ₃ Polymer Nanocomposite Films	https://doi-org.sdl.idm.oclc.org/10.1007/s10904-021-01995-2	Q2
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	https://doi-org.sdl.idm.oclc.org/10.1016/j.jallcom.2021.160625	Q1
Structural and magnetic properties of erbium substituted spinel ferrites for microwave absorptions	https://doi-org.sdl.idm.oclc.org/10.1080/16583655.2021.2005320	Q2

Structural, thermal, and mechanical characteristics of yttrium lithium borate glasses and glass-ceramics	https://doi-org.sdl.idm.oclc.org/10.1007/s10854-021-07158-w	Q3
Structure and AC electrical characterization for amorphous Se50Te50 thin-film fabricated by thermal evaporation technique	https://doi-org.sdl.idm.oclc.org/10.1016/j.physb.2021.412975	Q3
Synthesis and characterization of B2O3-Ag3PO4-ZnO-Na2O glasses for optical and radiation shielding applications	https://doi.org/10.1016/j.ijleo.2021.168199	Q2
Synthesis of Pb3O4-SiO2-ZnO-WO3 Glasses and their Fundamental Properties for Gamma Shielding Applications	https://doi-org.sdl.idm.oclc.org/10.1007/s12633-021-01347-2	Q3
Synthesis, Optical Absorption and Radiation Shielding Performance of Sodium Zinc Borate-Er2O3 Glasses	https://doi-org.sdl.idm.oclc.org/10.1007/s11664-020-08661-2	Q3
Synthesis, physical and nuclear shielding properties of novel Pb-Al alloys	https://doi-org.sdl.idm.oclc.org/10.1016/j.pnucene.2021.103992	Q1
The Evaluation of Structural, Electrical and Magnetic Properties of Samarium substituted Spinel Ferrites	https://doi-org.sdl.idm.oclc.org/10.1080/16583655.2021.2005321	Q2
The Influence of CoO/P2O5 Substitutions on the Structural, Mechanical, and Radiation Shielding of Boro-Phosphate Glasses	https://doi.org/10.3390/ma14216632	Q1
The role of PbF2 on the gamma-ray photon, charged particles, and neutron shielding prowess of novel lead fluoro bismuth borate glasses	https://doi-org.sdl.idm.oclc.org/10.1007/s10854-021-07382-4	Q3
The significant role of CeO2 content on the radiation shielding performance of Fe2O3-P2O5 glass-ceramics: Geant4 simulations study	https://doi-org.sdl.idm.oclc.org/10.1088/1402-4896/ac1028	Q2

Theoretical investigation of pressure sensing using a defect of polystyrene inside photonic crystals	https://doi-org.sdl.idm.oclc.org/10.1016/j.matchemphys.2021.124853	Q2
Synthesis, physical, optical, structural and radiation shielding characterization of borate glasses: A focus on the role of SrO/Al ₂ O ₃ substitution	https://doi-org.sdl.idm.oclc.org/10.1016/j.ceramint.2021.09.301	Q1
A Review of Chemotherapy and Photodynamic Therapy for Lung Cancer Treatment	https://doi.org/10.2174/1871520620666200403144945	Q3
Elastic properties and radiation shielding ability of ZnO–P ₂ O ₅ B ₂ O ₃ glass system	https://doi.org/10.1007/s10854-021-06442-z	Q2
Enhancement in Optical Properties of Lanthanum-Doped Manganese Barium Hexaferrites under Different Substitutions	https://doi.org/10.1155/2021/8849595	Q3
Fabrication of direct Z-scheme MoO ₃ /N-MoS ₂ photocatalyst for synergistically enhanced H ₂ production	10.1016/j.ijhydene.2021.09.230	Q2
Functionalized role of highly porous activated carbon in bismuth vanadate nanomaterials for boosted photocatalytic hydrogen evolution and synchronous activity in water	10.1016/j.ijhydene.2021.09.187	Q2
Growth and investigation of LaNiO ₃ /La ₂ O ₃ composites films for optoelectronic applications	https://doi.org/10.1016/j.ijleo.2021.168013	Q2
Structural and optical investigations on sprayed Co doped La ₂ O ₃ thin films along with photocatalytic and anti-bacterial applications	https://doi.org/10.1016/j.ijleo.2021.166837	Q2
Synthesis and physical characterization of Ni-doped La ₂ O ₃ for photocatalytic application under sunlight	https://doi.org/10.1007/s10854-021-05264-3	Q2
Synthesis of BiVO ₄ /NiFe ₂ O ₄ composite	https://doi.org/10.1007/s13204-021-02186-8	Q3

for photocatalytic degradation of methylene blue		
Novel green synthesis of hydroxyapatite uniform nanorods via microwave-hydrothermal route using licorice root extract as template	https://doi-org.sdl.idm.oclc.org/10.1016/j.ceramint.2020.09.256	Q1
Sn-induced changes in the structure and optical properties of amorphous As-Se-Sn thin films for optical devices	https://doi-org.sdl.idm.oclc.org/10.1007/s00339-020-04175-0	Q2
Ozone Depletion Identification in Stratosphere Through Faster Region-Based Convolutional Neural Network	https://www.techscience.com/cmc/v68n2/42163	Q2
Design of mesoporous ZnO @ silica fume-derived SiO ₂ nanocomposite as photocatalyst for efficient crystal violet removal: Effective route to recycle industrial waste	doi.org/10.1016/j.jclepro.2021.129416	Q1