جامعة الإمام عبد الرحمن بن فيصل
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY
مركز البحوث العلمية الأساسية و التطبيقية
Basic and Applied Scientific Research Center

Published Articles during 2021(1st January to 30th December)-Nanomaterials Technology Unit

DOI	Affliation		Q1,Q2,Q3,Q4	Name of Journal-Impact Factor	Year	Title	Number of puplications	Gender	Position	Name	
	Coll of SCi	BASRC									
https://doi.org/10.1088/1402-4896/abfba8	✓	✓	Q2	Physica Scripta	2021	Theoretical investigations of optoelectronic and thermoelectric properties of halide based double perovskite halides: K2TeX6	11	M	Associate professor	Taher Ghrib	1
https://doi.org/10.1016/j.ceramint.2021.04.201	✓	✓	Q1	Ceramics International	2021	Structural, Optical and Radiation Shielding Properties of Zirconium-Titanium-Thallium Ternary Oxide (0.5 ZrO2-(0.5-x) TiO2-xTl2O3)					
https://doi.org/10.1016/j.jmrt.2020.12.064	✓	✓	Q1	Journal of Materials Research and Technology	2021	Magnetic, dielectric and structural properties of spinel ferrites synthesized by sol-gel method					
https://doi.org/10.1016/j.matchemphys.2021.124435	✓	✓	Q2	Materials Chemistry and Physics	2021	A New Lead Free Double Perovskites K2Ti (Cl/Br) 6 for renewable energy; Probed by DFT					
https://doi.org/10.1149/2162-8777/abd880	✓	✓	Q1	ECS Journal of Solid State Science and Technology	2021	Study of Optoelectronic and Thermoelectric Characteristics of Cesium Based Halides CsYbX3 (X = Br, Cl) for Clean Energy Harvesting					
https://doi.org/10.1007/s10904-020-01761-w	✓	✓	Q1	Journal of Inorganic and Organometallic Polymers and Materials	2021	Effects of Terbium Doping on Structural, Optical and Photocatalytic Properties of ZnO Nanopowder Prepared by Solid-State Reaction					

https://doi.org/10.1016/j.physb.2021.413486	✓	✓	Q2	Physica B: Condensed Matter	2021	Structural, spectroscopic, dielectric, and magnetic properties of Fe/Cu co-doped hydroxyapatites prepared by a wet-chemical method					
https://doi.org/10.1007/s11664-021-09055-8	✓	✓	Q2	Journal of Electronic Materials	2021	Electrodeposition Study of Silver: Nucleation Process and Theoretical Analysis					
https://doi.org/10.1007/s13369-021-06290-3	✓	✓	Q2	arabian journal for science and engineering	2021	Structural, Optical, Dielectric and Magnetic Properties of Double Perovskite Oxides A2FeTiO6 (A =Zn, Mg, Cu) nanopowders					
https://doi.org/10.1016/j.spmi.2021.107119	✓	✓	Q2	Superlattices and Microstructures	2021	Annealing effect on the microstructural, optical, electrical, and thermal properties of Cu2O/TiO2/Cu2O/TiO2/Si heterojunction prepared by sol-gel technique					
https://doi.org/10.1016/j.jmrt.2021.12.002	✓	✓	Q1	Journal of Materials Research and Technology	2021	First-principles study of lead-free double perovskites Ga2PdX6 (X = Cl, Br, and I) for solar cells and renewable energy					
https://doi.org/10.1016/j.ceramint.2021.04.201	✓	✓	Q1	Ceramics International	2021	Structural, Optical and Radiation Shielding Properties of Zirconium-Titanium-Thallium Ternary Oxide (0.5 ZrO_2-(0.5-x) TiO_2-xTl2O3)					2
https://doi.org/10.1016/j.jnoncrysol.2021.120658	✓	✓	Q1	Journal of non-crystalline	2021	Gamma radiation shielding and structural features for barium strontium boro-tellurite glass modified with various concentrations of molybdenum oxide					
https://doi.org/10.1016/j.net.2020.07.035	✓	✓	Q1	Nuclear Engineering and Technology	2021	Investigation of photon, neutron and proton shielding features of H3BO3–ZnO–Na2O–BaO glass system					

https://doi.org/10.1140/epjp/s13360-020-01011-5	✓	✓	Q1	The European Physical Journal Plus	2021	Development of a novel MoO 3-doped borate glass network for gamma-ray shielding applications	13	M	Associate Professor	Mohammad Abu Mhareb	
https://doi.org/10.1140/epjp/s13360-020-00984-7	✓	✓	Q1	The European Physical Journal Plus	2021	Structural and radiation shielding features for a new series of borate glass samples: part I					
https://doi.org/10.1016/j.jallcom.2020.157636	✓	✓	Q1	Journal of Alloys and Compounds	2021	A comprehensive ionizing radiation shielding study of FexSe0. 5Te0. 5 alloys with various iron concentrations					
https://doi.org/10.1111/ijag.15859	✓	✓	Q2	International Journal of Applied Glass Science	2021	Physical, structural, optical and Gamma-ray shielding properties of Na2O-CdO-Bi2O3-B2O3 glasses					
https://doi.org/10.1016/j.ijleo.2021.166790	✓	✓	Q2	Optik	2021	Optical and radiation shielding features for a new series of borate glass samples					
https://doi.org/10.1016/j.apradiso.2021.109720	✓	✓	Q2	Applied Radiation and Isotopes	2021	A new heavy-mineral doped clay brick for gamma-ray protection purposes					
https://doi.org/10.1002/pssb.202000417	✓	✓	Q3	Physica Status Solidi b	2021	Investigation of Gamma Radiation Shielding Properties of Cadmium Bismuth Borate Glass Experimentally, XCOM Program and MCNP5 Code					
https://doi.org/10.1016/j.chemphys.2021.111227	✓	✓	Q3	Chemical physics	2021	Fabrication, Characterization of Neutron and Proton Shielding Investigation of Tungsten oxide dispersed-Ultra High Mw polyethylene					
http://doi.org/10.17576/jsm-2021-5010-24	✓	✓	Q3	Sains Malaysiana	2021	Impact of Al2O3 and Dy2O3 Substitution on the Physical, Structural, and Radiation Shielding Properties of Li2O-B2O3 Glass System					
https://doi.org/10.3390/app112210904	✓	✓	Q2	Applied sciences	2021	Impact of Modifier Oxides on Mechanical and Radiation Shielding Properties of B2O3-SrO-TeO2-RO Glasses (Where RO= TiO2, ZnO, BaO, and PbO)					

https://doi.org/10.1016/j.jallcom.2020.157019	✓	✓	Q1	Journal of Alloys and Compounds	2021	Enhanced critical current density and flux pinning traits with Dy_2O_3 nanoparticles added to $YBa_2Cu_3O_{7-d}$ superconductor.	7	F	Professor	Faten Ben Azzouz	3
https://doi.org/10.1016/j.ceramint.2020.11.007	✓	✓	Q1	Ceramics International	2021	Flux pinning mechanisms of (YBa2Cu3Oy-d)1-x/(Dy_2O_3)x superconductors (x=0.1 and 0.5 wt%)					
https://doi.org/10.1016/j.ceramint.2021.05.071	✓	✓	Q1	Ceramics International	2021	Preparation and characterization of high-Tc $(YBa_2Cu_3O_{7-\delta})_{1-x}$/$(CNTs)_x$ superconductors with highly boosted superconducting performances					
https://doi.org/10.1016/j.jallcom.2021.160887	✓	✓	Q1	Journal of Alloys and Compounds	2021	YBCO superconductor added with one-dimensional TiO_2 nanostructures: Frequency dependencies of AC susceptibility, FC-ZFC magnetization, and pseudo-gap studies					
https://doi.org/10.1016/j.cap.2021.04.013	✓	✓	Q2	Current Applied Physics	2021	Intergrain connectivity in $YBa_2Cu_3O_{7-\delta}$ superconductor added with Dy_2O_3 nanoparticles: AC susceptibility investigation					
https://doi.org/10.1016/j.ceramint.2021.08.336	✓	✓	Q1	Ceramics International	2021	Intergranular properties of polycrystalline $YBa_2Cu_3O_{7-\delta}$ superconductor added with nanoparticles of WO_3 and $BaTiO_3$ as artificial pinning centers					
https://doi.org/10.1140/epjp/s13360-021-02073-9	✓	✓	Q2	The European Physical Journal Plus	2021	Superconducting properties of YBCO bulk co-embedded by nano-BaTiO3 and WO3 particles					
https://doi.org/10.1016/j.mseb.2021.115064	✓	✓	Q1	Journal of Materials science and engineering B	2021	First-principles study of lead-free double perovskites Rb2TeX6 (X = Cl, Br, and I) for solar cells and renewable energy	44	M	Asssistant Professor	Qasim Mahmood	4
https://doi.org/10.1016/j.mseb.2021.115155	✓	✓	Q1	Journal of Materials science and engineering B	2021	Electronic and optical characteristics of 5d-transition metal doped 2D-NbSe2 monolayer for nanoelectronic device applications: An ab-initio-analysis					

https://doi.org/10.1140/epjp/s13360-021-01143-2	✓	✓	Q1	The European Physical Journal Plus	2021	Anionic variations for BaMg2X2 (X N to Bi) compounds by density functional theory					
https://doi.org/10.1140/epjp/s13360-021-01286-2	✓	✓	Q1	The European Physical Journal Plus	2021	The role of 5d electrons spin in quantum ferromagnetism and transport properties of double perovskites Cs2ZCl/Br6 (Z = Ta, W) for spintronic applications					
https://doi.org/10.1016/j.ceramint.2020.11.005	✓	✓	Q1	Ceramic International	2021	Evolution of structure and improvement in dielectric properties of praseodymium substituted YFeO3 nanomaterials synthesized via a sol-gel auto-combustion method					
https://doi.org/10.1016/j.physe.2020.114444	✓	✓	Q1	Physica E: Low-dimensional Systems and Nanostructures	2021	Investigations of thermoelectric properties of ZnO monolayers from the first-principles approach					
https://doi.org/10.1016/j.ceramint.2020.09.183	✓	✓	Q1	Ceramic International	2021	Exploring the potential of lead-chalcogenide monolayers for room-temperature thermoelectric applications					
https://doi.org/10.1016/j.mssp.2020.105313	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	Physical properties of lead-free double perovskites A2SnI6 (A= Cs, Rb) using ab-initio calculations for solar cell applications					
https://doi.org/10.1016/j.jpcs.2020.109665	✓	✓	Q2	Journal of Physics and Chemistry of Solids	2021	Optoelectronic and thermoelectric properties of double perovskite Rb2PtX6 (X = Cl, Br) for energy harvesting: First-principles investigations					
https://doi.org/10.1016/j.mssp.2020.105452	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	Study of optoelectronic and transport properties of MgLu2Z4 (Z=S, Se) spinels for optoelectronic and energy harvesting applications					
https://doi.org/10.1016/j.mssp.2021.105766	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	Structural, elastic, thermodynamic, electronic, optical and thermoelectric properties of MgLu2X4 (X= S, Se) spinel compounds from ab-initio calculations					

https://doi.org/10.1016/j.matchemphys.2021.124435	✓	✓	Q2	Materials Chemistry and Physics	2021	A new lead free double perovskites K2Ti(Cl/Br)6; a promising materials for optoelectronic and transport properties; probed by DFT					
https://doi.org/10.1016/j.jssc.2021.121988	✓	✓	Q2	Journal of Solid State Chemistry	2021	Lead Free Double Perovsites Halides X2AgTlCl6 (X = Rb, Cs) for solar cells and renewable energy applications					
https://doi.org/10.1016/j.jpcs.2021.110117	✓	✓	Q2	Journal of Physics and Chemistry of Solids	2021	Study of optical and thermoelectric properties of ZYbI3 (Z = Rb, Cs) for solar cells and renewable energy; Modelling by density functional theory					
https://doi.org/10.1149/2162-8777/abd880	✓	✓	Q2	ECS Journal of Solid State Science and Technology	2021	Study of Optoelectronic and Thermoelectric Characteristics of Cesium Based Halides CsYbX3 (X = Br, Cl) for Clean Energy Harvesting					
https://doi.org/10.1007/s00339-021-04433-9	✓	✓	Q2	Applied Physics A	2021	Pressure dependence of electronic, optical and thermoelectric properties of RbTaO3 perovskite					
https://doi.org/10.1088/1674-1056/abf128	✓	✓	Q3	Chinese Physics B	2021	Study of bandgap tuning of In1-xGaxY (Y = N, P) alloys for optoelectronic applications: abinitio calculations					
https://doi.org/10.1007/s13369-021-05378-0	✓	✓	Q3	Arabian Journal for Science and Engineering	2021	Pressure-Induced Modifications in the Optoelectronic and Thermoelectric Properties of MgHfO3 for Renewable Energy Applications					
https://doi.org/10.1002/er.6778	✓	✓	Q1	International Journal of Energy Research	2021	First principle study of lead-free double perovskites halides Rb_2Pd $(Cl/Br)_6$ for solar cells and renewable energy devices: A quantum DFT					
https://doi.org/10.1016/j.jpap.2021.100047	✓	✓	Q1	Journal of Photochemistry and Photobiology	2021	Enhancing the performance of dye-sensitized solar cell using nano-sized erbium oxide on titanium oxide photoanode by impregnation route					

https://doi.org/10.1002/er.7022	✓	✓	Q1	International Journal of energy research	2021	New lead-free double perovskites X2GeI6 (X = K, Rb, Cs) for solar cells, and renewable energy as an alternate of hybrid perovskites					
https://doi.org/10.1016/j.mseb.2021.115420	✓	✓	Q1	Materials Science and Engineering: B	2021	New lead-free double perovskites A2NaInI6 (A= Cs, Rb) for solar cells and renewable energy; first principles analysis					
https://doi.org/10.1016/j.jallcom.2021.162313	✓	✓	Q1	Journal of Alloys and Compounds	2021	Half metallic Ferromagnetism and Thermoelectric properties of Double Perovskites Rb2Z(Cl/Br)6 (Z = Ta, W, Re)					
https://doi.org/10.1016/j.jmrt.2021.09.154	✓	✓	Q1	Journal of materials science and technology	2021	First Principle Analysis of Lead-free Variant Perovskites Iodides for Optical and Thermoelectric Applications					
https://doi.org/10.1016/j.mssp.2021.106229	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	The study of electronics, optoelectronics, thermoelectric, and mechanical properties of Zn/CdSnO3 perovskites					
https://doi.org/10.1088/1402-4896/abfba8	✓	✓	Q2	Physica Scripta	2021	Theoretical investigations of optoelectronic and thermoelectric properties of halide based double perovskite halides: K2TeX6					
https://doi.org/10.1088/1402-4896/ac0187	✓	✓	Q2	Physica Scripta	2021	Study of half metallic ferromagnetism, transport and mechanical properties of X0.9375Ti0.0625Te (X= Ca, Sr, and Ba) alloys: for spintronics application					
https://doi.org/10.1088/1402-4896/ac246a	✓	✓	Q2	Physica Scripta	2021	First principle study of half metallic ferromagnetism and transport properties of spinel's ZnFe2(S/Se)4 for spintronic					
https://doi.org/10.1088/1402-4896/ac297a	✓	✓	Q2	Physica Scripta	2021	Study of optoelectronic and thermoelectric properties of double perovskites for renewable energy					

https://doi.org/10.1016/j.matchemphys.2021.124876	✓	✓	Q2	Journal of materials chemistry and Physics	2021	New lead-free double perovskites (Rb2GeCl/Br)6; a promising material for renewable energy applications					
https://doi.org/10.1016/j.jssc.2021.122480	✓	✓	Q2	Journal of Solid State Chemistry	2021	First principle study of optoelectronic and thermoelectric properties of magnesium based MgX2O4 (X= Sb, Bi) spinels					
https://doi.org/10.1016/j.jpcs.2021.110295	✓	✓	Q2	Journal of Solid State Chemistry	2021	First-principles calculations of mechanical, optoelectronic, and thermal properties of double perovskite K2GeCl/Br6 for solar cell applications					
https://doi.org/10.1016/j.mssp.2021.106180	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	Study of lead-free double perovskites halides Cs2TiCl6, and Cs2TiBr6 for optoelectronics, and thermoelectric applications					
https://doi.org/10.1016/j.mssp.2021.106218	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	Exploring electronic, structural, magnetic and thermoelectric properties of novel Ba2EuMoO6 double perovskite					
https://doi.org/10.1016/j.matchemphys.2021.125237	✓	✓	Q2	Journal of Physics and Chemistry of Solids	2021	First-principles investigations of Ba2NaIO6 double Perovskite semiconductor: Material for low-cost energy technologies					
https://doi.org/10.1088/1402-4896/ac04dc	✓	✓	Q2	Physica Scripta	2021	Electronic, optical, and transport properties of RbYbX3 (X= Cl, Br) for solar cells and renewable energy: A quantum DFT study					
https://doi.org/10.1016/j.jssc.2021.122294	✓	✓	Q2	Journal of Solid State Chemistry	2021	First-principles study of lead-free double perovskites K2Pt (Cl/Br) 6 for optoelectronic and renewable energy applications					
https://doi.org/10.1016/j.chemphys.2021.111322	✓	✓	Q2	Chemical Physics	2021	Tailoring of band gap to tune the optical and thermoelectric properties of Sr1-xBaxSnO3 stannates for clean energy; probed by DFT					

https://doi.org/10.1088/1674-1056/abf128	✓	✓	Q3	Chinese Physics B	2021	Study of bandgap tuning of In1-xGaxY (Y = N, P) alloys for optoelectronic applications: abinitio calculations					
https://doi.org/10.1007/s12034-021-02544-w	✓	✓	Q3	Bulletin of Materials Science	2021	First-principle study of electronic, optical and transport properties for (Zn/Cd) Sc2Se4 spinel chalcogenides					
https://doi.org/10.1007/s10948-021-05939-2	✓	✓	Q3	Journal of Superconductivity and Novel Magnetism	2021	Structural, Magnetic, and Dielectric Properties of Sn-Doped BiFeO3: Experiment and DFT Analysis					
https://doi.org/10.1016/j.jmrt.2021.12.002	✓	✓	Q1	Journal of Materials Research and Technology	2021	First-principles study of lead-free double perovskites Ga2PdX6 (X = Cl, Br, and I) for solar cells and renewable energy					
https://doi.org/10.1007/s00339-021-05152-x	✓	✓	Q2	Applied Physics A	2021	First principle study of magnesium-based chalcogenides MgLa2(S/Se)4 for solar cells and renewable energy applications					
https://doi.org/10.3390/ma15010055	✓	✓	Q2	Materials	2021	Half Metallic Ferromagnetism and Transport Properties of Zinc Chalcogenides ZnX2Se4 (X = Ti, V, Cr) for Spintronic Applications					
https://doi.org/10.1016/j.physb.2020.412782	✓	✓	Q2	Physica B: Condensed Matter	2021	Theoretical investigation of linear and nonlinear optical properties in an heterostructure based on triple parabolic barriers: Effects of external fields.	11	M	Associate professor	Hassen Dakhlaoui	5
https://doi.org/10.1016/j.spmi.2021.106885	✓	✓	Q2	Superlattices and Microstructures	2021	External fields controlling the nonlinear optical properties of quantum cascade laser based on staircase-like quantum wells.					
https://doi.org/10.1007/s13369-020-05168-0	✓	✓	Q1	Arabian Journal for Science and Engineering	2021	Magnetic Field and Hydrostatic Pressure Effects on Electron Transport in Heterostructure Based on InAs/GaAs Triple Barriers with Dresselhaus Interaction.					

https://www.sciencedirect.com/science/article/abs/pii/S1386947721002939	✓	✓	Q1	Physica E	2021	Optical properties of a quantum well with Razavy confinement potential: Role of applied external fields					
https://link.springer.com/article/10.1140/epjb/s10051-021-00194-9	✓	✓	Q2	The European physical journal B	2021	Characterization of spectral features of cavity modes in one-dimensional graphene-based photonic crystal structures					
https://link.springer.com/article/10.1140/epjp/s13360-021-01907-w	✓	✓	Q1	The European physical journal Plus	2021	Numerical simulation of linear and nonlinear optical properties in heterostructure based on triple Gaussian quantum wells: effects of applied external fields and structural parameters					
https://www.sciencedirect.com/science/article/pii/S221137972100615X	✓	✓	Q1	Results in Physics	2021	Modulating the conductance in graphene nanoribbons with multi-barriers under an applied voltage					
https://www.sciencedirect.com/science/article/pii/S2211379721005258	✓	✓	Q1	Results in Physics	2021	Quantum tunneling mechanisms in monolayer graphene modulated by multiple electrostatic barriers					
https://link.springer.com/article/10.1140/epjb/s10051-021-00129-4	✓	✓	Q2	The European physical journal B	2021	Nonlinear optical properties of a quantum well with inversely quadratic Hellman potential					
https://doi.org/10.1016/j.physb.2021.413555	✓	✓	Q1	Physica B: Condensed Matter	2021	Numerical investigation of quantum tunneling time and spin-current density in GaAs/GaMnAs/GaAs barriers: Role of an applied bias voltage					
https://doi.org/10.1140/epjp/s13360-021-02180-7	✓	✓	Q2	The European Physical Journal Plus	2021	Combined effects of electric, magnetic, and intense terahertz laser fields on the nonlinear optical properties in GaAs/GaAlAs quantum well with exponentially confinement potential					

https://doi.org/10.1007/s10904-021-01939-w	✓	✓	Q2	Journal of Inorganic and Organometallic Polymers and Materials	2021	Synthesis and Characterization of MoO3 for Photocatalytic Applications	5	F	Assistant professor	Amal Alotaibi	6
https://link.springer.com/article/10.1007/s10904-021-01999-y	✓	✓	Q2	Journal of Inorganic and Organometallic Polymers and Materials	2021	Yttrium doped single-crystalline orthorhombic molybdenum oxide micro-belts: Synthesis, structural, optical and photocatalytic properties					
https://doi.org/10.1007/s10904-020-01761-w	✓	✓	Q1	Journal of Inorganic and Organometallic Polymers and Materials	2021	Effects of Terbium Doping on Structural, Optical and Photocatalytic Properties of ZnO Nanopowder Prepared by Solid-State Reaction					
https://doi.org/10.1007/s11664-021-09055-8	✓	✓	Q2	Journal of Electronic Materials	2021	Electrodeposition Study of Silver: Nucleation Process and Theoretical Analysis					
https://doi.org/10.1007/s10904-021-02038-6	✓	✓	Q1	Journal of Inorganic and Organometallic Polymers and Materials	2021	Correction to: Synthesis and Characterization of MoO3 for Photocatalytic Applications					
https://doi.org/10.1007/s10904-021-01939-w	✓	✓	Q2	Journal of Inorganic and Organometallic Polymers and Materials	2021	Synthesis and Characterization of MoO3 for Photocatalytic Applications	5	F	Associate professor	Imen Massoudi	7
https://doi.org/10.1016/j.chemphys.2020.111076	✓	✓	Q1	Chemical Physics	2021	Novel linear/nonlinear dependence between the Viscosity Arrhenius parameters correlation in Newtonian liquids					
https://doi.org/10.1007/s10904-020-01761-w	✓	✓	Q1	Journal of Inorganic and Organometallic Polymers and Materials	2021	Effects of Terbium Doping on Structural, Optical and Photocatalytic Properties of ZnO Nanopowder Prepared by Solid-State Reaction					
https://doi.org/10.1007/s11664-021-09055-8	✓	✓	Q2	Journal of Electronic Materials	2021	Electrodeposition Study of Silver: Nucleation Process and Theoretical Analysis					

https://doi.org/10.1007/s10904-021-02038-6	✓	✓	Q1	Journal of Inorganic and Organometallic Polymers and Materials	2021	Correction to: Synthesis and Characterization of MoO3 for Photocatalytic Applications					
https://doi.org/10.1016/j.optmat.2021.110960	✓	✓	Q1	Optical Materials	2021	Electrically tunable cholesteric liquid crystal lines defects	5	M	Assistant professor	Ridha Hamdi	8
https://doi.org/10.1016/j.chemphys.2020.111076	✓	✓	Q1	Chemical Physics	2021	Novel linear/nonlinear dependence between the Viscosity Arrhenius parameters correlation in Newtonian liquids					
https://doi.org/10.1016/j.optcom.2021.127456	✓	✓	Q2	Optical Materials	2021	Bubbles structure & droplet of glycerol forming system of lenses with tunable focal length					
https://doi.org/10.1007/s11664-021-09055-8	✓	✓	Q2	Journal of Electronic Materials	2021	Electrodeposition Study of Silver: Nucleation Process and Theoretical Analysis					
https://doi.org/10.1016/j.molliq.2021.118201	✓	✓	Q1	Journal of Molecular Liquids	2021	Synthesis and physicochemical studies of double fluorinated hydrogen-bonded liquid crystals (n-OBAFF)					
https://doi.org/10.1016/j.net.2020.07.035	✓	✓	Q1	Nuclear Engineering and Technology	2021	Investigation of photon, neutron and proton shielding features of H3BO3–ZnO–Na2O–BaO glass system	1	F	Assistance professor	Noha Saleh	9
https://doi.org/10.1016/j.ijleo.2021.166790	✓	✓	Q2	Optik	2021	Optical and radiation shielding features for a new series of borate glass samples	6	F	Assistance professor	Muna alqahtani	10
https://doi.org/10.1016/j.net.2020.07.035	✓	✓	Q1	Nuclear Engineering and Technology	2021	Investigation of photon, neutron and proton shielding features of H3BO3–ZnO–Na2O–BaO glass system					
https://doi.org/10.1140/epjp/s13360-020-01011-5	✓	✓	Q1	The European Physical Journal Plus	2021	Development of a novel MoO 3-doped borate glass network for gamma-ray shielding applications					
https://doi.org/10.1140/epjp/s13360-020-00984-7	✓	✓	Q1	The European Physical Journal Plus	2021	Structural and radiation shielding features for a new series of borate glass samples: part I					
https://doi.org/10.1016/j.matchemphys.2021.125047	✓	✓	Q2	Materials Chemistry and Physics	2021	Ionizing radiation shielding features for titanium borosilicate glass modified with different concentrations of barium oxide					

DOI:10.1016/j.ijleo.2021.167924	✓	✓	Q1	Optik	2021	The impact of TeO2 on physical, structural, optical and radiation shielding features for borate glass samples with different concentrations of barium oxide					
https://doi.org/10.1016/j.mssp.2021.105736	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	Insights into the structural, electronic and optical properties of MgA2B4(A = Sc, Y; B = S, Se) spinel compounds: Direct energy band gap materials	14	F	Assistant professor	Tahani H. Flemban	11
https://doi.org/10.1016/j.jssc.2021.121988	✓	✓	Q2	Journal of Solid State Chemistry	2021	Lead Free Double Perovsites Halides X2AgTlCl6 (X = Rb, Cs) for solar cells and renewable energy applications					
https://doi.org/10.1016/j.jpcs.2021.110117	✓	✓	Q2	Journal of Physics and Chemistry of Solids	2021	Study of optical and thermoelectric properties of ZYbI3 (Z = Rb, Cs) for solar cells and renewable energy; Modelling by density functional theory					
https://doi.org/10.1016/j.mseb.2021.115064	✓	✓	Q1	Journal of Materials science and engineering B	2021	First-principles study of lead-free double perovskites Rb2TeX6 (X = Cl, Br, and I) for solar cells and renewable energy					
https://doi.org/10.1002/er.6695	✓	✓	Q1	International Journal of Energy Research	2021	First-principles calculations of structural, electronic, optical, and thermoelectric properties of ternary d-metal sulfides Sc2CdS4 and Y2CdS4 compounds					
https://doi.org/10.1002/er.6504	✓	✓	Q1	International Journal of Energy Research		Prediction of novel X2ZnZ4(X = Sc, Y; Z = S, Se) spinels materials for renewable energy applications					
https://doi.org/10.1149/2162-8777/abd880	✓	✓	Q1	ECS Journal of Solid State Science and Technology	2021	Study of Optoelectronic and Thermoelectric Characteristics of Cesium Based Halides CsYbX3 (X = Br, Cl) for Clean Energy Harvesting					
https://doi.org/10.1016/j.jpcs.2020.109665	✓	✓	Q2	Journal of Physics and Chemistry of Solids	2021	Optoelectronic and thermoelectric properties of double perovskite Rb2PtX6 (X = Cl, Br) for energy harvesting: First-principles investigations					

https://doi.org/10.1016/j.mssp.2021.106229	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	The study of electronics, optoelectronics, thermoelectric, and mechanical properties of Zn/CdSnO3 perovskites					
https://doi.org/10.1007/s12034-021-02544-w	✓	✓	Q3	Bulletin of Materials Science	2021	First-principle study of electronic, optical and transport properties for (Zn/Cd) Sc2Se4 spinel chalcogenides					
https://doi.org/10.1016/j.jmrt.2021.09.154	✓	✓	Q1	Journal of Materials Research and Technology	2021	First Principle Analysis of Lead-free Variant Perovskites Iodides for Optical and Thermoelectric Applications					
https://doi.org/10.1016/j.jallcom.2021.162313	✓	✓	Q1	Journal of Alloys and Compounds	2021	Half metallic Ferromagnetism and Thermoelectric properties of Double Perovskites Rb2Z(Cl/Br)6 (Z = Ta, W, Re) for Spintronics					
https://doi.org/10.1007/s11664-021-09055-8	✓	✓	Q2	Journal of Electronic Materials	2021	Electrodeposition Study of Silver: Nucleation Process and Theoretical Analysis					
https://doi.org/10.1007/s10948-021-05939-2	✓	✓	Q3	Journal of Superconductivity and Novel Magnetism	2021	Structural, Magnetic, and Dielectric Properties of Sn-Doped BiFeO3: Experiment and DFT Analysis					
https://doi.org/10.1016/j.mssp.2021.105736	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	Insights into the structural, electronic and optical properties of MgA2B4(A = Sc, Y; B = S, Se) spinel compounds: Direct energy band gap materials		F	Assistant professor	Hind Althib	12
https://doi.org/10.1016/j.jssc.2021.121988	✓	✓	Q2	Journal of Solid State Chemistry	2021	Lead Free Double Perovsites Halides X2AgTlCl6 (X = Rb, Cs) for solar cells and renewable energy applications					

https://doi.org/10.1016/j.jpcs.2021.110117	✓	✓	Q2	Journal of Physics and Chemistry of Solids	2021	Study of optical and thermoelectric properties of ZYbI3 (Z = Rb, Cs) for solar cells and renewable energy; Modelling by density functional theory	14				
https://doi.org/10.1016/j.mseb.2021.115064	✓	✓	Q1	Journal of Materials science and engineering B	2021	First-principles study of lead-free double perovskites Rb2TeX6 (X = Cl, Br, and I) for solar cells and renewable energy					
https://doi.org/10.1002/er.6695	✓	✓	Q1	International Journal of Energy Research	2021	First-principles calculations of structural, electronic, optical, and thermoelectric properties of ternary d-metal sulfides Sc2CdS4 and Y2CdS4 compounds					
https://doi.org/10.1002/er.6504	✓	✓	Q1	International Journal of Energy Research	2021	Prediction of novel X2ZnZ4(X = Sc, Y; Z = S, Se) spinels materials for renewable energy applications					
https://doi.org/10.1149/2162-8777/abd880	✓	✓	Q1	ECS Journal of Solid State Science and Technology	2021	Study of Optoelectronic and Thermoelectric Characteristics of Cesium Based Halides CsYbX3 (X = Br, Cl) for Clean Energy Harvesting					
https://doi.org/10.1016/j.jpcs.2020.109665	✓	✓	Q2	Journal of Physics and Chemistry of Solids	2021	Optoelectronic and thermoelectric properties of double perovskite Rb2PtX6 (X = Cl, Br) for energy harvesting: First-principles investigations					
https://doi.org/10.1016/j.rinp.2021.103943	✓	✓	Q1	Results in physics	2021	Effect of Quantum Barrier Width and Quantum Resonant Tunneling Through InGaN/GaN Parabolic Quantum Well-LED Structure on LED Efficiency					
https://doi.org/10.1016/j.mssp.2021.106229	✓	✓	Q2	Materials Science in Semiconductor Processing	2021	The study of electronics, optoelectronics, thermoelectric, and mechanical properties of Zn/CdSnO3 perovskites					
https://doi.org/10.1007/s12034-021-02544-w	✓	✓	Q3	Bulletin of Materials Science	2021	First-principle study of electronic, optical and transport properties for (Zn/Cd) Sc2Se4 spinel chalcogenides					

https://doi.org/10.1016/j.jmrt.2021.09.154	✓	✓	Q1	Journal of Materials Research and Technology	2021	First Principle Analysis of Lead-free Variant Perovskites Iodides for Optical and Thermoelectric Applications					
https://doi.org/10.1016/j.jallcom.2021.162313	✓	✓	Q1	Journal of Alloys and Compounds	2021	Half metallic Ferromagnetism and Thermoelectric properties of Double Perovskites Rb2Z(Cl/Br)6 (Z = Ta, W, Re) for Spintronics					
https://doi.org/10.1007/s10948-021-05939-2	✓	✓	Q3	Journal of Superconductivity and Novel Magnetism	2021	Structural, Magnetic, and Dielectric Properties of Sn-Doped BiFeO3: Experiment and DFT Analysis					
https://doi.org/10.37934/mjcsm.4.1.11127	✓	✓	Q2	malaysian journal of composites science & manufacturing	2021	Electrical Conductivity and Antenna Properties of Polyaniline filled GNPs Nanocomposites	4	M	Assistant professor	Moayad Husein Flaifel	13
https://doi.org/10.3390/nano11082143	✓	✓	Q1	Nanomaterials	2021	The Effect of Precursor Concentration on the Particle Size, Crystal Size, and Optical Energy Gap of CexSn1− xO2 Nanofabrication					
https://doi.org/10.1002/macp.202100185	✓	✓	Q1	Macromolecular Chemistry and Physics	2021	Assessment of Mechanical and Electrical Performances of Polylactic Acid/Liquid Natural Rubber/Graphene Platelets Nanocomposites in the Light of Different Graphene Platelets					
https://doi.org/10.1016/j.jmrt.2021.11.046	✓	✓	Q1	Journal of Materials Research and Technology	2021	Enhanced magnetic nanoparticles dispersion effect on the behaviour of ultrasonication-assisted compounding processing of PLA/LNR/NiZn nanocomposites					
https://doi.org/10.1007/s10971-021-05470-9	✓	✓	Q1	Journal of Sol-Gel Science and Technology	2021	Synthesis and characterization of spinel ferrites for microwave devices	4	F	Assistant professor	Norah H Alonizan	14
https://doi.org/10.1007/s10904-020-01722-3	✓	✓	Q1	journal of inorganic and organometallic polymers and materials	2021	Effects of CdS Nanoparticles on the Physical Properties of T-CdS Nanocomposite Materials					

https://doi.org/10.1016/j.net.2020.07.035	✓	✓	Q1	Nuclear Engineering and Technology	2021	Investigation of photon, neutron and proton shielding features of H3BO3–ZnO–Na2O–BaO glass system					
https://doi.org/10.1007/s10904-021-02171-2	✓		Q1	Journal of Inorganic and Organometallic Polymers and	2021	Facile Synthesis and Antibacterial Activity of Bioplastic Membrane Containing In Doped ZnO/Cellulose					
https://doi.org/10.1007/s41779-021-00611-3	✓	✓	Q3	Journal of The Australian Ceramic Society-1.526	2021	Investigation of the effects of Ni-doping on the structural and thermal properties of $ZnAl_2O_4$ spinels prepared by wet chemical method.	**5**	F	Professor	Filiz Ercan	15
https://doi.org/10.1016/j.molstruc.2021.130557	✓	✓	Q2	Journal of Molecular Structure-2.463	2021	Theoretical and experimental characterization of Pr/Ce co-doped hydroxyapatites.					
https://doi.org/10.1016/j.matchemphys.2021.125444	✓	✓	Q2	Journal of The Australian Ceramic Society	2021	Experimental characterization and theoretical investigation of Ce/Yb co-doped hydroxyapatites					
https://doi.org/10.1016/j.physb.2021.413486	✓	✓	Q1	Physica B: Condensed Matter	2021	Structural, spectroscopic, dielectric, and magnetic properties of Fe/Cu co-doped hydroxyapatites prepared by a wet-chemical method					
https://doi.org/10.1007/s13369-021-06290-3	✓	✓	Q2	Arabian Journal for Science and Engineering	2021	Structural, Optical, Dielectric and Magnetic Properties of Double Perovskite Oxides A2FeTiO6 (A= Zn, Mg, Cu) Nanopowders					

- عدد الأبحاث المنشورة للوحدة (بدون التكرار بين أعضاء الوحدة) هي ١٠٦ أبحاث للفترة من يناير ٢٠٢١ الى ديسمبر ٢٠٢١

Last Update: 30 Dec 2021