

#	Publication title	Journal, Year of publication	List of authors
1	Thermal stability and crystallization kinetics of Sb additive of As-Se glasses,	Journal of thermal analysis and calorimetry, (2021)	Mansour Mohamed, Mohamed N. Abd-el Salam
2	The role of doping and heating rate in optimizing the crystallization parameters of As ₃₅ Se _{65-x} Sb _x glasses	Applied Physics A, (2021)	Mohamed N. Abd el Salam, E. R. Shaaban, Mansour Mohamed
3	Role of the annealing temperature for optimizing the optical and electronic parameters of Ge ₁₀ Se ₇₅ Ag ₁₅ films for optoelectronic applications	Optical and Quantum Electronics (2021)	A. Z. Mahmoud, M. A. Abdel-Rahim, Mansour Mohamed
4	Experimental and theoretical studies of glass and crystallization kinetics of semiconducting As ₄₀ Se ₄₀ Ag ₂₀ chalcogenide glass	Physica B: Condensed Matter, (2021)	Mohamed N.Abd-el Salam, E.R.Shaaban, F.Benabdallah, Abdelwahab M.A.Hussein, Mansour Mohamed
5	Optical, photoluminescence and ferromagnetic properties of Ni-doped ZnO for optoelectronic applications	J. Mater Sci: Mater. Electron. (2021)	Mansour Mohamed, A. Sedky, Abdullah S. Alshammari, Mohamed Gandouzi
6	Interfacial Microstructure and Corrosion Behaviour of Mild Steel Coated with Alumina Nanoparticles Doped Tin Composite via Direct Tinning Route	Coatings, (2021)	AS Alghamdi, KS Abdel Halim, MA Amin, AS Alshammari, N Fathy,
7	Fabrication and characterization of high-performance photodetectors based on Au/CdS/Au and Au/Ni: CdS/Au junctions	Journal of King Saud University-Science, (2021)	H Albargi, ZR Khan, R Marnadu, HY Ammar, H Algadi, A Umar, IM Ashraf
8	Noticeably enhanced opto-electrical and photodetection performance of spray pyrolysis grown Mn: CdS nanostructured thin films for visible-light sensor applications	Surfaces and Interfaces, (2021)	ZR Khan, MS Revathy, M Shkir, A Khan, MA Sayed, A Umar
9	Third order optical nonlinearities in CdS nanostructured thin films: a comprehensive review	Journal of Materials Science: Materials in Electronics, (2021)	ZR Khan, M Shkir
10	Improved optoelectronic performance of sol-gel	Inorganic Chemistry Communications, (2021)	ZR Khan, AS Alshammari, M Bouzidi, M Shkir, DK Shukla

	derived ZnO nanostructured thin films		
11	DFT study of the structural and optoelectronic properties of Cd _{1-x} Ag _x S half metallic alloys	Materials Science in Semiconductor Processing, (2021)	M Gandouzi, AS Alshammari, ZR Khan, M Bouzidi
12	Structural, linear and nonlinear optical properties of Zn@ CdO nanostructured thin films: a quantitative comparison with DFT	Journal of Materials Science: Materials in Electronics, (2021)	ZR Khan, M Gandouzi, AS Alshammari, M Bouzidi, M Shkir, S Alfaify
13	Effect of Er doping on linear and nonlinear optical properties of NiO films	Chinese Journal of Physics, (2021)	M Shkir, ZR Khan, MA Sayed, KV Chandekar, A Khan, A Kumar
14	Facile fabrication of Ag/Y: CdS/Ag thin films-based photodetectors with enhanced photodetection performance	Sensors and Actuators A: Physical, (2021)	M Shkir, ZR Khan, KV Chandekar, T Alshahrani, IM Ashraf, A Khan
15	A comprehensive experimental investigation of La@ CdS nanostructured thin films: Structural, opto-nonlinear and photodetection properties	Surfaces and Interfaces, (2021)	M Shkir, ZR Khan, AS Alshammari, M Gandouzi, IM Ashraf, S Alfaify
16	Improved Photodetection Performance of Nanostructured CdS films Based Photodetectors Via Novel Er Doping	Journal of Inorganic and Organometallic Polymers and Materials, (2021)	ZR Khan, M Shkir, AS Alshammari, IM Ashraf, S Alfaify
17	Correlation of structural and optical properties of AlGaIn films grown on SiN-treated sapphire by MOVPE	Materials Science and Engineering: B, (2021)	M Bouzidi, AS Alshammari, S Soltani, I Halidou, Z Chine, ZR Khan
18	A facile microwave-assisted synthesis of novel ZnMn ₂ O ₄ nanoparticles and their structural,	Indian Journal of Physics, (2021)	ZR Khan, M Shkir, V Ganesh, IS Yahia, S Alfaify
19	Optical characterization by photorefectance of GaN after its partial thermal decomposition"	Optik, (2021)	W. Malek, A. Kahouli, M. Bouzidi, N. Chaaben, Abdullah S. Alshammari, J.P.Salvestrini, A. Rebey
20	High impact of thiol capped ZnS nanocrystals on the degradation of single and binary aqueous solutions of industrial azo dyes under sunlight	Journal of Environmental Chemical Engineering, (2021)	Sabri Ouni, Naim Bel Haj Mohamed, Mohamed Bouzidi, Adrian Bonilla-Petriciolet, Mohamed Haouari

21	Impact of the stacking fault and surface defects states of colloidal CdSe nanocrystals on the removal of reactive black 5"	Materials Science and Engineering: B, (2021)	Naim Bel Haj Mohamed, Mohamed Bouzidi, Nassim Ben brahim, Lotfi Sellaoui, Mohamed Haouari, Hatem Ezzaouia
22	Electronic properties tuning of defective heterostructured CNB nanotubes by uniaxial pressure: a density functional study	Applied Physics A: Materials science and processing, (2021)	Saed Salman, Najeh Rekik, Jamal Suleiman, and Alaaedeen R. Abuzir
23	Exploring the X-ray photoabsorption spectrum of Sodium in the energy range 1070-1090 eV by elucidating the inner shell excitation transition probabilities	Journal of Physics B: Atomic, Molecular and Optical Physics, (2021)	Jamal Suleiman, Najeh Rekik, Saed Salman, Adil Alshoaibi and Alaaedeen R. Abuzir
24	Evaluating the effectiveness of eggshells to remove heavy metals from wastewater	Desalination and Water Treatment, (2021)	Murad Ali Khaskheli, Mohammad Ilyas Abro, Ram Chand, Ehsan Elahi, Faiz Muhammad Khokhar, Asghar Ali Majidano, El Hassan El Aaoud, Najeh Rekik
25	Detailed Inspection of γ -ray, Fast and Thermal Neutrons Shielding Competence of Calcium Oxide or Strontium Oxide Comprising Bismuth Borate Glasses".	Materials, (2021)	Gandham Lakshminarayana, Youssef Elmahroug, Ashok Kumar, Huseyin Ozan Tekin, Najeh Rekik, Mengge Dong, Dong-Eun Lee, Jonghun Yoon, Taejoon Park.
26	Confirming the SERS enhancement at large mapping area using self-assembly of silver nanocube at liquid-liquid cyclohexane/water interface	Journal of Molecular Liquids, (2021)	Sain Bux Jamali, Murad Ali. Khaskheli, Mohammad Ilyas Abro, Norah A. M. Alsaif, Ram Chand, Hira Affan and Najeh Rekik
27	Calculating photon buildup factors in determining the γ -ray shielding effectiveness of some materials susceptible to be used for the conception of neutrons and γ -ray shielding	Journal of Materials Research and Technology, (2021)	Norah A.M. Alsaif, Youssef Elmahroug, B.M. Alotaibi, Haifa A. Alyousef, Najeh Rekik, A. Wahab M.A. Hussein, Ram Chand, Umer Farooq
28	Periodic and nonperiodic amplifications of attosecond solitons in an inhomogeneous lossy optical fiber	Optik, (2021)	Ben Khalifa Sana, Saleh Chebaane, V. Senthil Nayagam, Saravana Veni, and MS Mani Rajan
29	Multilayers method for designing the W-shape raised cosine few-mode fibers	Journal of optics, (2021)	Saleh Chebaane, Sana Ben Khalifa, Fares Benabdallah, Mansour Mohamad, Fekhra Hedhili, Shereen M. Al-Shomar

30	Performance evaluation of a 4× Gbps OFDM-based FSO link incorporating hybrid W-MDM techniques	Frontiers in physics, (2021)	Mehtab singh, Saleh Chebaane, Sana ben khalifa, Amit Grover
31	Design of Novel Circular Lattice Photonic Crystal Fiber suitable for transporting 48 OAM modes	Optoelectronics Letters, (2021)	Rejeb.A,Habib Fathallah, Saleh Chebaane, Mohsen Machhout
32	Electronic, optical, and transport properties of RbYbX ₃ (X = Cl, Br) for solar cells and renewable energy: a quantum DFT study	Physica Scripta, (2021)	Mahmood, Qasim, F. Hedhili, S. Al-Shomar, Saleh Chebaane, Tahani I. Al-Muhimeed, Abeer A. AlObaid, Abeer Mera, and Osama Abdulaziz Alamri
33	Parameter extraction of photovoltaic models using a comprehensive learning Rao-1 algorithm	Journal of Conversion energy and management, (2021)	Anouar Farah, Akram Belazi, Feres Benabdallah, Abdulaziz Almala, Mohamed Chtourou, M.A. Abido
34	High Surface Area of Polyhedral Chromia and Hexagonal Chromium Sulfide by the Thermolysis of Cyclohexylammonium Hexaisothiocyanatochromate(I II) Sesquihydrate	Chemistry Sel (2021)	Abdulaziz A. Bagabas, Murad Alsawalha, Kamal K. Taha, Abdelhamid Albaid, Manzar Sohail, Mahdi Alqahtani, Rasheed Alrasheed, Abdulaziz Alqarn, Bandar Ashamari, and Ivan P. Parkin
35	Computational and experimental investigations on electronic and optical response of oxygenated MoS ₂	Physica Scripta, (2021)	Mubashra Shakeel, M Javaid Iqbal, Mamoor Iftikhar, Umer Farooq, Muhammad Tauseef Qureshi, A Wahab MA Hussein, Ram Chand, Hira Affan, Murtaza Saleem
36	Yb/InSe/SiO ₂ /Au Straddling-Type Tunneling Devices Designed as Photosensors, MOS Capacitors, and Gigahertz Bandstop Filters.	IEEE Transactions on Electron Devices, (2021)	Alfhaid Latifah, Qasrawi, Atef, and Algarni Sabah
37	Yb/inse/sb ₂ te ₃ /au broken gap heterojunction devices designed as current rectifiers, tunable mos capacitors and gigahertz microwave cavities.	Chalcogenide Letters, (2021)	Alfhaid Latifah, Qasrawi, Atef, and Algarni Sabah.
38	Poly(oligo(ethylene glycol) methyl ether methacrylate) Capped pH-Responsive Poly(2-(diethylamino)ethyl methacrylate) Brushes Grafted on Mesoporous Silica Nanoparticles	Polymers, (2021)	Alotaibi, K.M., Almethen, A.A., Beagan, A.M., Alfheid, L.H., Ahamed, M., El-Toni, A.M. and Alswieleh, A.M.

39	Band Offsets, Optical Conduction, Photoelectric and Dielectric Dispersion in InSe/Sb ₂ Te ₃ Heterojunctions	Materials Research Ibero-american Journal of Materials, (2021)	Alfhaid Latifah, Qasrawi, Atef, and Algarni Sabah
40	Correlation between experimental and DFT calculations of photocatalytic and optical properties of La _{0.8} Nd _{0.1} Sr _{0.1} MnO ₃ perovskite: degradation efficiency of methyl orange dye under visible-irradiated conditions	Journal of Materials Science: Materials in Electronics, (2021)	Messaoudi, O., A. Mabrouki, M. Moufida, L. Alfhaid, A. Azhary, and S. Elgharbi.
41	Adsorption of Paracetamol in Contaminated Water Through pH-Responsive Polymer-Brush-Grafted Mesoporous Silica Nanoparticles.	International Journal of Environmental Analytical Chemistry, (2021)	Alfhaid Latifah
42	The influence of a dielectric spacer layer on the morphological, optical and electrical properties of self-dewetted silver nanoparticles	Phase Transitions, (2021)	Leila Manai, Béchir Dridi Rezgui, Damien Barakel, Philippe Torchio, Olivier Palais, Olfa Messaoudi, Arwa Azhary, Feriel Bouhjar, Brahim Bessais
43	Novel p-type Ag-WO ₃ nano-composite for low-cost electronics, photocatalysis, and sensing: synthesis, characterization, and application	Journal of Alloys and Compounds, (2021)	Lubna Aamir
44	Low-cost photoresponsive ITO/Ag-WO ₃ /Ag Schottky diode,	Handbook of Nanomaterials for Sensing Applications, (2021)	Lubna Aamir
45	Comparison of different time discretization schemes for solving the Allen–Cahn equation	International Journal of Nonlinear Sciences and Numerical Simulation, (2021)	S Ayub, A Rauf, H Affan, A Shah
46	An Empirical Model for Carbon Diffusion in Grey Iron / Stainless Steel Bimetallic Composites incorporating Eutectic Carbides	International Journal of Metal casting, (2021)	M. Ramadan, K. S. Abdel Halim, A. S. Alghamdi, Abdul Khaliq and N. Fathy
47	Influence of heat treatment on interfacial microstructure of cast Babbitt /carbon steel bimetallic materials,	IOP Conf. Series: Materials Science and Engineering, (2021)	M. Ramadan, N. Fathy
48	Synthesis and characterization of Eu ³⁺ doped	Materials Research Express, (2021)	S M AL-Shomar

	TiO ₂ thin films deposited by spray pyrolysis technique for photocatalytic application.		
49	Study of the structural, electronic, magnetic and magnetocaloric properties of La _{0.5} Ca _{0.5} Mn _{0.9} V _{0.1} O ₃ sample: first-principles calculation (DFT–MFT)	RSC Adv., (2021)	Mabrouki, A., Messaoudi, O., Mansouri, M., Elgharbi, S. and Bardaoui, A.
50	Non-covalent assembly of β -iminoamine-chlorocobaltate(II) hybrid material: Molecular structure, computational simulations and antimicrobial activity	Journal of Molecular Structure, (2021)	Teka, Safa, Melek Hajji, Achref Jebnoui, Olfa Messaoudi, Dorsaf Mansour, and Taha Guerfel
51	Magnetocaloric effect of polycrystalline La _{0.5} Sm _{0.2} Sr _{0.3} Mn _{1-x} Cr _x O ₃ ($0 \leq x \leq 0.20$) compound prepared by glycine-nitrate process	Journal of Materials Science: Materials in Electronics, (2021)	Abdouli, K., Cherif, W., Valent, M.A., Graça, M.P.F., Ktari, L., Messaoudi, O., Elgharbi, S. and Elsofany, W.I

Publications for the year 2021