

Publications of Department of Physics

for the years (2020-2021-2022)

Publications for the year 2020

#	Publication title	Journal, Year of publication	List of authors
1	Structure, morphology and photocatalytic activity of ZnO nanorods fabricated by electrochemical deposition	Applied Physics A, (2020)	Mansour Mohamed , Abdullah S. Alshammari, M. Almokhtar
2	Correlation between the Properties of Sol-Gel Synthesized Graphene/Titania Hybrid Nanostructures and Their Catalytic Activity in Selective Aerobic Oxidation of Alcohols	ECS Journal of Solid State Science and Technology, (2020)	Hamed M. Alshammari, Nadir Abbas, Jamal R. Humaidi, Salma A. Alzahrani, Abdullah S. Alshammari, Mosaed S. Alhumaimess, Obaid F. Aldosari ⁵ and Hassan M. A. Hassan
3	Au-Pd Bimetallic Nanocatalysts Incorporated into Carbon Nanotubes (CNTs) for Selective Oxidation of Alkenes and Alcohol	Process, (2020)	Hamed M. Alshammari , Abdullah S. Alshammari , Jamal R. Humaidi , Salma A. Alzahrani, Mosaed S. Alhumaimess , Obaid F. Aldosari and Hassan M. A. Hassan
4	A facile microwave synthesis of Cr-doped CdS QDs and investigation of their physical properties for optoelectronic applications	Applied Nanoscience, (2020)	Mohd Shkir, Ziaul Raza Khan, Kamlesh V Chandekar, T Alshahrani, Ashwani Kumar, S AlFaify
5	Microwave-assisted synthesis of Mg: PbI ₂ nanostructures and their structural, morphological, optical, dielectric and electrical properties for optoelectronic technology	Chinese Physics B, (2020)	Mohd Shkir, Ziaul Raza Khan, T Alshahrani, Kamlesh V Chandekar, M Aslam Manthrammel, Ashwani Kumar, S AlFaify

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6	Facile microwave synthesis of bismuth molybdate nanostructures and their characterization for optoelectronic applications	Solid State Sciences, (2020)	Ziaul Raza Khan, Mohd Shkir, T Alshahrani, M Aslam Manthrammel, S AlFaify
7	Linear, third order nonlinear optical and photoluminescence properties of Cd _{0.99} Zn _{0.01} S/ZnO nanocomposite thin films for optoelectronics applications	Surfaces and Interfaces, (2020)	Ziaul Raza Khan, Abdullah S Alshammari, Mohd Shkir, S AlFaify
8	Emission and opto-dielectric nonlinearity in 2D Cd–ZnO–Na nanostructures: an effect of Na doping	Journal of Materials Science: Materials in Electronics, (2020)	Ziaul Raza Khan, Abdullah S Alshammari, M Bouzidi, M Gandouzi, Mohd Shkir, S Alfaif
9	Opto-dielectric-nonlinear properties of Na–Zn–CdS alloys nanostructure thin films: Role of Zn doping	Physica B: Condensed Matter, (2020)	Ziaul Raza Khan, Mohd Shkir, S Alfaify
10	Structure, morphology and opto-nonlinear behaviors of Nd: PbI ₂ /FTO thin film system for optoelectronics	Solid State Sciences, (2020)	Ziaul Raza Khan, Mohd Shkir, Aslam Khan, Sivalingam Muthu Mariappan, M Balaji, Md Raheijuddin Sheikh, S AlFaify
11	Enhancement in the photoluminescence, linear and third order nonlinear optical properties of nanostructured Na-CdS thin films for optoelectronic applications	Journal of Nanoparticle Research, (2020)	Ziaul Raza Khan, Abdullah S Alshammari, Mohd Shkir, V Ganesh, S AlFaify
12	A facile microwave-assisted synthesis of novel ZnMn ₂ O ₄ nanoparticles and their structural, morphological, optical, surface area, and dielectric studies	Indian Journal of Physics, (2020)	Ziaul Raza Khan, Mohd Shkir, V Ganesh, IS Yahia, S AlFaify

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13	A comprehensive study of opto-electrical and nonlinear properties of Cu@ CdS thin films for optoelectronics	Chinese Journal of Physics, (2020)	Mohd Shkir, ZR Khan, Mohd Anis, SS Shaikh, S AlFaify
14	A unified quantum model susceptible to elucidate the dissimilarity of IR spectral density of dicarboxylic acid crystals: Phthalic and terephthalic acid crystals cases	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2020)	Najeh Rekik, Norah A.M.Alsaif, Henryk T.Flakus Umer Farooq, Ram Chand
15	Reckoning of nuclear radiation attenuation capabilities for binary GeO ₂ -TiO ₂ , GeO ₂ -Bi ₂ O ₃ , and ternary GeO ₂ -TiO ₂ -Bi ₂ O ₃ glasses utilizing pertinent theoretical and computational approaches	Optical Materials, (2020)	G. Lakshminarayana, Y. Elmahroug, Ashok Kumar, Najeh Rekik, Dong-Eun Lee, Jonghun Yoon, Taejoon Park
16	How far the vibrational exciton interactions are responsible for the generation of the infrared spectra of oxindole crystals?	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2020)	Najeh Rekik, T.Flakus, Barbara Hachulad, Saed Salman, Adil Alshoaibi, Umer Farooq
17	Elucidating the theoretical X-ray photoabsorption spectrum of Argon near the KM edge: Transition probabilities calculations	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2020)	Jamal Suleiman, Najeh Rekik, Saed Salman, Adil Alshoaibi
18	Quantum walk with quadratic position-dependent phase defects	Quantum information processing, (2020)	Umer Farooq, Abdullah S. Alshammari & Najeh Rekik
19	Investigation the effect of doping concentration in Ruthenium-doped TiO ₂ thin films for solar cells and sensors applications	Materials Research Express, (2020)	Shereen Mohammad Al-Shomar
20	Effect of bismuth doping on structural and electrical properties of 0.9(BaZr _{0.2} Ti _{0.8} O ₃)-0.1(Ba _{0.7} Ca _{0.3} TiO ₃) ceramic	Ceramics International, (2020)	N. Othmania , A. Amouria , F. Benabdallah, Z. Sassic , L. Seveyrat, L. Lebrun, V. Perrinc, H. Khemakhem

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21	Inverse-raised-cosine fibers for next-generation orbital angular momentum system	Optics communications, (2020)	Alaaeddine Rjeb, Gianluca Guerra, Khaled Issa, Habib Fathallah, Saleh Chebaane, Mohsen Machhout, Luca Palmieri, Andrea Galtaross
22	Adhesion of Grafted-to Polyelectrolyte Brushes Functionalized with Calix[4]resorcinarene and Deposited as a Monolayer	Langmuir, (2020)	William D. Seddon, Latifah Alfheid, Alan D. F. Dunbar, Mark Geoghegan, and Nicholas H. Williams
23	Adhesion between oppositely charged polyelectrolytes in salt solution	Journal of applied polymer science, (2020)	Latifah Alfheid , Nicholas H. Williams , Mark Geoghegan
24	Discovery of Highly Selective Inhibitors of Calmodulin-Dependent Kinases That Restore Insulin Sensitivity in the Diet-Induced Obesity in Vivo Mouse Model	JOURNAL OF MEDICINAL CHEMISTRY, (2020)	Lubna Aamir et al.
25	Annealing temperature investigation on electrodeposited Cu ₂ O properties	Phase Transitions, (2020)	Olfa Messaoudi , Sarra Elgharbi , Amira Bougoffa , Moufida Mansouri , Afrah Bardaoui , Safa Teka , Leila Manai & Arwa Azhary