

**1-Coherent photoproduction of a  $\pi^0$ -meson on a tensor-polarized deuteron at large momentum transfer**

VV Gauzshtein, BI Vasilishin, [EM Darwish](#), AI Fix, MY Kuzin, MI Levchuk...  
*Results in Physics* 38, 105573

**2-Measurement of the tensor analyzing power component T20 for the incoherent neutral-pion photoproduction on a deuteron**

BI Vasilishin, AI Fix, VV Gauzshtein, [EM Darwish](#), MY Kuzin, MI Levchuk...  
*Physical Review C* 106 (2), 024003

**3-Spin correlation coefficients in lepton-deuteron elastic scattering and their sensitivity to realistic NN potentials**

[EM Darwish](#), ZMM Mahmoud, SS Al-Thoyaib  
*Modern Physics Letters A* 37 (06), 2250035

**4-Polarization observables in elastic lepton-deuteron scattering and their sensitivity to realistic NN potentials**

WR Alharbi, M Mohery, [EM Darwish](#)  
*Journal of Taibah University for Science* 16 (1), 89-97

**5-Polarization Effects In Elastic Lepton-Deuteron Scattering and their Sensitivity to Realistic Deuteron Wave Functions**

WR Alharbi, M Mohery, [EM Darwish](#)  
*Brazilian Journal of Physics* 52 (3), 1-9

**6-Influence of nucleon structure on spin correlation coefficients in elastic lepton-deuteron scattering**

[EM Darwish](#), A Mindil  
*International Journal of Modern Physics E* 31 (03), 2250022

**7-Measurements of the T20 Analyzing Power Tensor Component of the  $\gamma d \rightarrow pn\pi^0$  Reaction**

B. I. Vasilishin, V. V. Gauzshtein, S. A. Zevakov, M. Ya. Kuzin, M. I. Levchuk, A. Yu. Loginov, D. M. Nikolenko, I. A. Rachev, D. K. Toporkov, A. I. Fix, Yu. V. Shestakov, [E. M. Darwish](#), A. V. Yurchenko  
*Russian Physics Journal* 64 (10), 1792-1796

**8-Uncertainties in theoretical predictions for  $\gamma d \rightarrow \pi^0 d$  observables near threshold due to the use of different elementary amplitudes**

HM Al-Ghamdi, [EM Darwish](#), AA Ibraheem, HM Abou-Elsebaa  
*Revista Mexicana de Fisica* 68(6), 6480 (1-19)

**9- Influence of nucleon structure on tensor spin asymmetries in elastic lepton deuteron scattering**

E. M. Darwish Z. M. M. Mahmoud  
*Moscow University Physics Bulletin* 77 (1), 31-42

**10- Measurement of the tensor analyzing power T20 for the reaction  $\gamma d \rightarrow pn\pi^0$  in the region of low proton energies**

B. I. Vasilishin, V. V. Gauzshtein, [E. M. Darwish](#), A. I. Fix et al.,

LXXII International conference NUCLEUS-2022 on "Fundamental problems and Applications", July 11–16, (2022), Moscow, Russia.

**11- Neutron yield as a measure of achievement nuclear fusion using a mixture of deuterium and tritium isotopes**

[A Youssef](#), R Anwar, II Bashter, EA Amin, SM Reda  
*Physica Scripta* 97 (8), 085601

**12- Influence of uranium dioxide and reflector surface on neutron yields of the nuclear hybrid fusion-fission reaction using MCUNED code**

Sonia M Reda, Emad I Khalil, Dalia Anwar and [Ahmed Youssef](#)  
*Physica Scripta* 97 (8), 085305

**13-Interacting planetary nebulae III: verification and galactic population based on the measurements of Gaia EDR3**

[M Mohery](#), A Ali, A Mindil, SA Alghamdi  
*Astrophysics and Space Science* 367 (6), 1-17

**14-The Response of the Earth's Lower Ionosphere to Gamma-Ray Solar Flares and their Associated X-ray**

[M Mohery](#), HM Farid, A Ali  
*Research in Astronomy and Astrophysics* 22 (4), 04501

**15-Composite material-based a clay for adsorption desalination and cooling applications**

AS Alsaman, [EMM Ibrahim](#), AA Askalany, AM Farid, ES Ali, MS Ahmed  
*Chemical Engineering Research and Design* 188, 417-432

**16-Electrical and thermoelectrical properties of Bi2-xNaxTe3 alloys**

[AM Adam](#), [AK Diab](#), MA El-Hadek, AO Sayed, [EMM Ibrahim](#)  
*Journal of Alloys and Compounds* 920, 165952

**17-Characterization and cost analysis of a modified silica gel-based adsorption desalination application**

AS Alsaman, AA Askalany, [EMM Ibrahim](#), AM Farid, ES Ali, MS Ahmed  
*Journal of Cleaner Production*, 134614

**18-AC and DC electrical properties of CuO nanoparticles synthesized using free surfactant hydrothermal method**

MP Monis, [A Abdelhakeem](#), [NM Hadia](#), [HAA Saadallah](#), [EMM Ibrahim](#)  
*Sohag Journal of Sciences* 7 (3), 95-101

**19-Solar powered adsorption desalination system employing CPO-27 (NI)**

M Ghazy, AA Askalany, [EMM Ibrahim](#), ASA Mohamed, ES Ali, ALD Raya  
*Journal of Energy Storage* 53, 105174

**20-Experimental investigation of sodium polyacrylate-based innovative adsorbent material for higher desalination and cooling effects**

AS Alsaman, [EMM Ibrahim](#), MS Ahmed, ES Ali, AM Farid, AA Askalany  
*Energy Conversion and Management* 266, 115818

**21-Experimental investigation of hybrid photovoltaic solar thermal collector (PV/T)-adsorption desalination system in hot weather conditions**

M Ghazy, [EMM Ibrahim](#), ASA Mohamed, AA Askalany  
*Energy*, 124370

**22-Cooling technologies for enhancing photovoltaic–thermal (PVT) performance: a state of the art**

M Ghazy, [EMM Ibrahim](#), ASA Mohamed, AA Askalany

*International Journal of Energy and Environmental Engineering*, 1-31

**23-Composite adsorbent materials for desalination and cooling applications: A state of the art**

AS Alsaman, [EMM Ibrahim](#), MS Ahmed, AA Askalany

*International Journal of Energy Research*

**24-Operation Conditions Investigation of An Adsorption Desalination/Cooling System Driven by Solar Energy**

M Ghazy, [E Ibrahim](#), M ASA, A Askalany

*Sohag Journal for Young Researchers* 2 (2), 22 -36

**25-Influence of Cr-doping on structural, magnetic and dielectric properties of M-type hexaferrites synthesized using microwave digestion technique**

[AMA Hakeem](#), [EMM Ibrahim](#), [HM Ali](#), [MM Abd El-Raheem](#), A Hamzaoui... \*

*Physica Scripta* 97 (2), 025803

**26-Effect of CuS buffer layer on the structural and optical properties of TeO<sub>2</sub> nanowires: a comparative study**

A Alhazime, [SH Mohamed](#), MT Khan, [MA Awad](#)

*Physica Scripta*

**27-Poly-3-Methyl Aniline-Assisted Spherical PbS Quantum Dots through the Ionic Adsorption Deposition Method as a Novel and Highly Efficient Photodetector in UV, Vis, and NIR Region**

[NMA Hadia](#), S Eid, M Shaban, [SH Mohamed](#), AM Elsayed, [AM Ahmed](#)... \*

*Adsorption Science & Technology* 2022, 7693472

**28-Bunch of Grape-Like Shape PANI/Ag<sub>2</sub>O/Ag Nanocomposite Photocatalyst for Hydrogen Generation from Wastewater**

[NMA Hadia](#), A Hajjiah, AM Elsayed, [SH Mohamed](#), M Alruqi, M Shaban... \*

*Adsorption Science & Technology* 2022, 4282485

**29-Suppressing photoluminescence and enhancing light absorption of TiO<sub>2</sub> via using TiO<sub>2</sub>/TiN/TiO<sub>2</sub> plasmonic multilayers for better solar harvesting**

[SH Mohamed](#), AA Alhazime

*Journal of Materials Research and Technology*

**30-Poly(m-toluidine)/rolled graphene oxide nanocomposite photocathode for hydrogen generation from wastewater**

M Rabia, [NMA Hadia](#), OM Farid, AAA Abdelazez, [SH Mohamed](#)...

*International Journal of Energy Research* 46, 11943–11956

**31-Optical constants, photoluminescence and thermogravimetry of ZnS–ZnO hybrid nanowires synthesized via vapor transport**

[SH Mohamed](#), [MA Awad](#), M Shaban

*Applied Physics A* 128, 274

**32-Convertng Sewage Water Into H<sub>2</sub> Fuel Gas Using Cu/CuO Nanoporous Photocatalytic Electrodes**

[NMA Hadia](#), AAA Abdelazez, M Alzaid, M Shaban, [SH Mohamed](#)... \*

*Materials* 15, 1489

**33-Highly crystalline hexagonal PbI<sub>2</sub> sheets on polyaniline/antimony tin oxide surface as a novel and highly efficient photodetector in UV, Vis, and near IR regions**

[NMA Hadia](#), [M Shaban](#), [SH Mohamed](#), [AF Al-Ghamdi](#), [M Alzaid](#)...  
*Polymers for Advanced Technologies*

**34-Structural, optical and electrical properties of Bi<sub>2</sub>-xMn<sub>x</sub>Te<sub>3</sub> thin films**

[NMA Hadia](#), [SH Mohamed](#), [WS Mohamed](#), [M Alzaid](#), [MT Khan](#), [MA Awad](#)  
*Journal of Materials Science: Materials in Electronics* 33, 158–166

**35-Synthesis and characterization of undoped and copper doped zinc oxide nanowires for optoelectronic and solar cells applications**

[NMA Hadia](#), [M Aljudai](#), [M Alzaid](#), [SH Mohamed](#), [WS Mohamed](#)  
*Applied Physics A* 128, 17

**36-Effect of Bi content on the physical parameters of Ge<sub>18</sub>Bi<sub>x</sub>Se<sub>82-x</sub> chalcogenide glasses**

[SK Mohamed](#), [A El-Raheem](#), [MM Wakkad](#), [HM Fathi](#)  
*Sohag Journal of Sciences* 7 (3), 79-84

**37-Study of radiation effect and bismuth content on the physical properties of some chalcogenides based on selenium**

[MM Abd El-Raheem](#), [AHM Solieman](#), [MM Wakkad](#), [HM Ali](#)...  
*Physica Scripta* 97 (8), 085807

**38-Optical and recombination losses in CIGS thin-film solar cell and efficiency enhancement methods**

[HA Mohamed](#), [EK Shokr](#), [MM Wakkad](#), [NMA Hadia](#), [YA Taya](#)  
*Optoelectronics and Advanced Materials-Rapid Communications* 16 (May-June...

**39-The Effects of Gamma Irradiation on the Optical and Electrical Properties of Melt Quench Ge<sub>18</sub>Bi<sub>4</sub>Se<sub>78</sub> Chalcogenide Glass**

[M M Abd El-Raheem](#), [H E Hassan](#), [M M Wakkad](#), [H M Ali](#)  
*Information Sciences Letters* 11 (3), 28

**40-DFT study of super-halogen (Al<sub>7</sub>) doped carbon nitride (C<sub>2</sub>N) and its nonlinear optical properties**

[A Hussain](#), [NMA Hadia](#), [MM Hessien](#), [RA Khera](#), [S Zahid](#), [RA Shehzad](#)...  
*Journal of Molecular Structure* 1270, 133910

**41-Hydrothermally assisted zinc phosphate doped with polyaniline for high-performance supercapattery devices**

[M Alzaid](#), [MZ Iqbal](#), [SR Ali](#), [MM Faisal](#), [NMA Hadia](#), [A Tozri](#)  
*Materials Chemistry and Physics* 291, 126638

**42-Designing of symmetrical ADA type non-fullerene acceptors by side-chain engineering of an indacenodithienothiophene (IDTT) core based molecule: A computational approach**

[M Waqas](#), [NMA Hadia](#), [MM Hessien](#), [SJ Akram](#), [AM Shawky](#), [J Iqbal](#)...  
*Computational and Theoretical Chemistry*, 113904

**43-DFT molecular modelling of A<sub>2</sub>-D-A<sub>1</sub>-D-A<sub>2</sub> type DF-PCIC based small molecules acceptors for organic photovoltaic cells**

[S Sabir](#), [NMA Hadia](#), [J Iqbal](#), [RF Mehmood](#), [SJ Akram](#), [MI Khan](#)...  
*Chemical Physics Letters*, 140026

**44-ATO/Polyaniline/PbS Nanocomposite as Highly Efficient Photoelectrode for Hydrogen Production from Wastewater with Theoretical Study for the Water Splitting**

[MAH Khalafalla](#), [NMA Hadia](#), [AM Elsayed](#), [M Alruqi](#), [W El Malti](#), [M Shaban](#)...  
*Adsorption Science & Technology* 2022

**45-Conversion of Sewage Water into H<sub>2</sub> Gas Fuel Using Hexagonal Nanosheets of the Polyaniline-Assisted Deposition of PbI<sub>2</sub> as a Nanocomposite Photocathode with the...**

[NMA Hadia](#), MAH Khalafalla, FM Abdel Salam, [AM Ahmed](#), M Shaban...  
*Polymers 14 (11), 2148*

**46-Development of CuO nanoporous material as a highly efficient optoelectronic device**

AAA Abdelazeez, [NMA Hadia](#), M Alzaid, M Shaban, AHI Mourad...  
*Applied Physics A 128 (4), 1-10*

**47-Impact of Cu<sup>2+</sup> cations substitution on structural, morphological, optical and magnetic properties of Co<sub>1-x</sub>Cu<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> nanoparticles synthesized by a facile hydrothermal approach**

[WS Mohamed](#), [NMA Hadia](#), M Alzaid, AM Abu-Dief  
*Solid State Sciences 125, 106841*

**48-Effect of Au Plasmonic Material on Poly M-Toluidine for Photoelectrochemical Hydrogen Generation from Sewage Water**

AAA Abdelazeez, [NMA Hadia](#), AHI Mourad, GA El-Fatah, M Shaban...  
*Polymers 14 (4), 768*

**49-Thickness controlling bandgap energy, refractive index and electrical conduction mechanism of 2D Tungsten Diselenide (WSe<sub>2</sub>) thin films for photovoltaic applications**

M Alzaid, [NMA Hadia](#), ER Shaaban, M El-Hagary, [WS Mohamed](#)  
*Applied Physics A 128 (2), 1-12*

**50-Quantum chemical modification of indaceno dithiophene-based small acceptor molecules with enhanced photovoltaic aspects for highly efficient organic solar cells**

EU Rashid, [NMA Hadia](#), O Alaysuy, J Iqbal, MM Hessien, GAM Mersal...  
*RSC Advances 12 (44), 28608-28622*

**51-Engineering of W-shaped benzodithiophenedione-based small molecular acceptors with improved optoelectronic properties for high efficiency organic solar cells**

EU Rashid, [NMA Hadia](#), J Iqbal, RF Mehmood, HH Somaily, SJ Akram...  
*RSC advances 12 (34), 21801-21820*

**52-Impact of various heterocyclic  $\pi$ -linkers and their substitution position on the opto-electronic attributes of the A- $\pi$ -D- $\pi$ -A type IECIO-4F molecule: a comparative analysis**

SJ Akram, [NMA Hadia](#), J Iqbal, RF Mehmood, S Iqbal, AM Shawky, A Asif...  
*RSC advances 12 (32), 20792-20806*

**53-Amorphous molybdenum trioxide thin films for gas sensing applications**

[HM Ali](#), [EK Shokr](#), [YA Taya](#), [SA Elkot](#), [MF Hasaneen](#), [WS Mohamed](#)  
*Sensors and Actuators A: Physical 335, 113355*

**54-Critical exponents and magnetic entropy change across the continuous magnetic transition in (La, Pr)-Ba manganites**

A Tozri, R Kamel, [WS Mohamed](#), J Laifi, E Dhahri, EK Hlil  
*Applied Physics A 128 (7), 1-15*

**55-Optical and electrical properties of GaZnO films deposited by co-sputtering method on two types of substrates**

[YA Taya](#), [MM Abd El-Raheem](#), [HM Ali](#), [HA Mohamed](#), [AM Abdel Hakeem](#)  
*Phase Transitions 95 (8-9), 581-595*

**56-Structural and optical properties of transparent conducting oxide Cd<sub>1-x</sub>CrxO thin films prepared by the sol-gel dip-coating method**

[MF Hasaneen](#), MS Shalaby, NM Yousif, [AK Diab](#), EF El Agammy  
*Materials Science and Engineering: B* 280, 115703

**57-Outstanding optical properties of thermally grown (Bi<sub>2</sub>Se<sub>3</sub>) 1-x (Bi<sub>2</sub>Te<sub>3</sub>) x thin films**

[AM Adam](#), [AK Diab](#), M Tolan, ZMH El-Qahtani, AA Refaat, MA El-Hadek...  
*Materials Science in Semiconductor Processing* 143, 106557

**58-Optimized thermoelectric performance in thin (Bi<sub>2</sub>Se<sub>3</sub>) 1- x (Bi<sub>2</sub>Te<sub>3</sub>) x alloyed films**

[AM Adam](#), [AK Diab](#), M Ataalla, MF Alotaibi, AN Alharbi, EM Elsehly  
*Journal of Alloys and Compounds* 898, 162888

**59-Structural, electrical and optical properties investigation of nano-sized Sb<sub>0.1</sub> (SnO<sub>2</sub>) 0.9**

[SA Mohamed](#), [MR Ahmed](#), [HM Ali](#), [AMA Hakeem](#)  
*Physica Scripta* 97 (4), 045810

**60-Study of Optical, Electrical and Photocatalysis Properties of SrMnO<sub>3</sub> Synthesized by Solid-State Reaction**

[Mahrous R. Ahmed](#), [H. M. Ali](#), [M. F. Hasaneen](#), Amira Etman I and [A. M. Abdel hakeem](#)  
*Inf. Sci. Lett* 11 (2), 457-463

**61-Structural, electrical and optical properties investigation of nano-sized Sb<sub>< sub> 0.1</sub>(SnO< sub> 2</sub></sub>>)< sub> 0.9</sub></sub>**

[SA Mohamed](#), [MR Ahmed](#), [HM Ali](#), [AMA Hakeem](#)  
*Physica Scripta*, 045810

**62-Heat treatment effects on the structural and optical properties of thin Bi<sub>2</sub> (Se<sub>1-x</sub>Tex)<sub>3</sub> films**

ZMH El-Qahtani, MA El-Hadek, MF Alotaibi, P Petkov, [AM Adam](#)  
*Ceramics International* 48 (21), 31148-31156

**63-Transport and thermoelectric properties of Nb-doped FeV<sub>0.64</sub>Hf<sub>0.16</sub>Ti<sub>0.2</sub>Sb half-Heusler alloys synthesized by two ball milling regimes**

A El-Khouly, [AM Adam](#), Y Altowairqi, I Serhienko, E Chernyshova...  
*Journal of Alloys and Compounds* 890, 161838

**64-High electric field-induced relaxor to ferroelectric phase transition in (Bi<sub>0.5</sub>Na<sub>0.3</sub>K<sub>0.2</sub>) TiO<sub>3</sub>-SrTiO<sub>3</sub>-(Ba<sub>0.8</sub>Ca<sub>0.2</sub>) TiO<sub>3</sub> Pb-free piezoelectric ceramic**

[MF Hasaneen](#), AE Mahmoud, ZA Alrowaili, M Ezzeldien  
*Applied Physics A* 128 (4), 1-8

**65- The Co-precipitated preparation, characterization, and optical investigations of Cu-doped CdO nanomaterials**

M S Shalaby, Abdelnaby M Elshahawy, N M Yousif, E F El Agammy, T A Elmosalami and [M F Hasaneen](#)  
*Phys. Scr.* 97, 055805

**66-Optoelectronic Properties of ZrO<sub>2</sub>/Cu/ZrO<sub>2</sub> Multilayers Prepared by DC Pulsed Magnetron Sputtering for Electrode and Nano-Filter Applications**

[M Raaif](#), [AA Abd El-Moula](#), [FM El-Hossary](#), W Aroua, [MA El-Kassem](#)  
*ECS Journal of Solid State Science and Technology* 11 (8), 085011

**67-Design of a new label free active biosensor based on metallic nanoparticles-doped graphene nanodisk platform**

W Aroua, J Derbali, [M Raaif](#), F AbdelMalek  
*Optics Communications* 515, 128220

**68-Surface treatment of Fe<sub>63</sub>Mn<sub>27</sub>Si<sub>4</sub>Cr<sub>6</sub> shape memory alloy at varied plasma powers for enhancement of the corrosion resistance, mechanical, and tribological properties**

HM Abd El-Lateef, [FM El-Hossary](#), [MA Kassem](#), [AM Abd El-Rahman](#)

*Materials Today Communications*, 103799

**69-Activated-TiO<sub>2</sub> Using UV Irradiation for Effective Core-shell Structured PANI-TiO<sub>2</sub> Active Layer and Efficiency Assessment of Organic Solar Cells**

MA Shahat, A Ghitass, [FM El-Hossary](#), [AM Abd El-Rahman](#)

*Recent Trends in Chemical and Material Sciences Vol. 8*, 107-127

**70-Performance Enhancement of Organic Solar Cells via Modification of the PANI-TiO<sub>2</sub> Interface with Hydrogen Plasma Treatment**

MA Shahat, A Ghitass, [FM El-Hossary](#), [AM Abd El-Rahman](#)

*Recent Trends in Chemical and Material Sciences Vol. 8*, 72-88

**71-Tuning the luminescence performance of CdO nanoparticles via Tb<sub>2</sub>O<sub>3</sub> inclusion**

[MA Awad](#), AM Abu-Dief

*Physica Scripta* 97 (8), 085811

**72- Opto-electro-structural properties of Ge-doped Sb<sub>65</sub>Se<sub>35</sub> alloys**

[SA Saleh](#)

*Journal of Taibah University for Science*, 2022 - Taylor & Francis

**73-Optimal temperature and Mn content for enhancing optical properties and inducing room temperature ferromagnetism of Mn doped In<sub>2</sub>O<sub>3</sub> nanocube**

[MA Awad](#), M Rabia

*Applied Physics A* 128, 225

**74-The efficiency of M (M= Li, Na, or Cs) doped CdS nanomaterials in optoelectronic applications**

[MA Awad](#), M Shaban, M Rabia

*International Journal of Energy Research*