

CURRICULUM VITAE

PERSONAL DATA

Name	Osamah Abdulrahman Aldaghri
Nationality	Saudi
Position	Associate Professor
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EDUCATION

Year	Academic Degree	Institution
2014	PhD	University of Leeds, Leeds, UK.
2006	MSc	King Saud University, Riyadh, SA.
2001	BSc	King Saud University, Riyadh, SA.

WORK EXPERIENCE

Period	Position	Address
2021- Now	Associate Professor	Physics Department, College of Science, IMSIU
2015- 2021	Assistant Professor	Physics Department, College of Science, IMSIU
2007-2015	Lecturer	Physics Department, College of Science, IMSIU
2002 - 2007	Researcher	Physics Department & Astronomy, Faculty of Sciences, King Saud University

RESEARCH INTERESTS

Engineering the electronic structure of nano-lasers, Modelling and Simulations of the Electronic Structure of Photonics, Semiconductor Lasers, Spectroscopy, Nanotechnology and applications, Material Science and its Bio-applications.

PUBLICATIONS

- 1 .Dennis, John Ojur; Shukur, MF; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; Adam, Abdullahi Abbas; Usman, Fahad; Hassan, Yarima Mudassir; Alsadig, A; Danbature, Wilson L; Abdulkadir, Bashir Abubakar; ; A Review of Current Trends on Polyvinyl Alcohol (PVA)-Based Solid Polymer Electrolytes; *Molecules*; 28; 1781; 2023; MDPI
- 2 .Ali, Amal Mohamed Ahmed; Ahmed, Naser M; Kabir, Norlaili A; AL-Diabat, Ahmad M; Algadri, Natheer A; Alsadig, Ahmed; Aldaghri, Osamah A; Ibnaouf, Khalid H; ; Sensitivity of Al-Doped Zinc-Oxide Extended Gate Field Effect Transistors to Low-Dose X-ray Radiation; *Materials*; 16; 1868; 2023; Multidisciplinary Digital Publishing Institute
- 3 .Zango, Zakariyya Uba; Rozaini, Muhammad Nur'Hafiz; Bakar, Noor Hana Hanif Abu; Zango, Muttaqa Uba; Haruna, Maje Alhaji; Dennis, John Ojur; Alsadig, Ahmed; Ibnaouf, Khalid Hassan; Aldaghri, Osamah A; Wadi, Ismael Abdalla; ; Advancements in Clay Materials for Trace Level Determination and Remediation of Phenols from Wastewater: A Review; *Separations*; 10; 125; 2023; Multidisciplinary Digital Publishing Institute
- 4 .Ahmed Ali, Amal Mohamed; Ahmed, Naser M; Kabir, Norlaili A; Algadri, Natheer A; AL-Diabat, Ahmad M; Wadi, IA; Alsadig, Ahmed; Aldaghri, Osamah A; Ibnaouf, Khalid H; ; Towards Extended Gate Field Effect Transistor-Based Radiation Sensors: Impact of Thicknesses and Radiation Doses on Al-Doped Zinc Oxide Sensitivity; *Crystals*; 13; 314; 2023; Multidisciplinary Digital Publishing Institute
- 5 .Ojur Dennis, John; Ali, Mohammed Khalil Mohammed; Ibnaouf, Khalid Hassan; Aldaghri, Osama; Abdel All, Naglaa FM; Adam, Abdullahi Abbas; Usman, Fahad; Hassan, Yarima Mudassir; Abdulkadir, Bashir Abubakar; ; Effect of ZnO Nanofiller on Structural and Electrochemical Performance Improvement of Solid Polymer Electrolytes Based on Polyvinyl Alcohol–Cellulose Acetate–Potassium Carbonate Composites; *Molecules*; 27; 5528; 2022; MDPI
- 6 .Kausar, Ayesha; Ahmad, Ishaq; Zhao, Tingkai; Eisa, MH; Aldaghri, O; ; Graphene Nanofoam Based Nanomaterials: Manufacturing and Technical Prospects; *Nanomanufacturing*; 3; 37-56; 2023; Multidisciplinary Digital Publishing Institute
- 7 .Mahmad, Afzan; Zango, Zakariyya Uba; Noh, Teh Ubaidah; Usman, Fahad; Aldaghri, Osamah; Ibnaouf, Khalid Hassan; Shaharun, Maizatul Shima; ; Response surface methodology and artificial neural network for prediction and validation of bisphenol a adsorption onto zeolite imidazole framework; *Groundwater for Sustainable Development*; ; 100925; 2023; Elsevier
- 8 .Usman, Fahad; Ghazali, Kamarul Hawari; Muda, Razali; Dennis, John Ojur; Ibnaouf, Khalid Hassan; Aldaghri, Osamah A; Alsadig, Ahmed; Johari, Nasrul Hadi; Jose, Rajan; ; Detection of Kidney Complications Relevant Concentrations of Ammonia Gas Using Plasmonic Biosensors: A Review; *Chemosensors*; 11; 119; 2023; MDPI
- 9 .Alqanoo, Anas AM; Ahmed, Naser M; Hashim, Md Roslan; Alsadig, Ahmed; Al-Yousif, Shahad; Taya, Sofyan A; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; ; Coating Readily Available Yet Thermally Resistant Surfaces with 3D Silver Nanowire Scaffolds: A Step toward Efficient Heater Fabrication; *Coatings*; 13; 315; 2023; MDPI
- 10 .Alqanoo, Anas AM; Ahmed, Naser M; Hashim, Md R; Almessiere, Munirah A; Taya, Sofyan A; Alsadig, Ahmed; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; ; Synthesis and Deposition of Silver Nanowires on Porous Silicon as an Ultraviolet Light Photodetector; *Nanomaterials*; 13; 353; 2023; MDPI
- 11 .Dalhatu, Sani Nazifi; Modu, Kolo Alhaji; Mahmoud, Auwal Adamu; Zango, Zakariyya Uba; Umar, Abdullahi Bello; Usman, Fahad; Dennis, John Ojur; Alsadig, Ahmed; Ibnaouf, Khalid Hassan; Aldaghri, Osamah A; ; L-Arginine Grafted Chitosan as Corrosion Inhibitor for Mild Steel Protection; *Polymers*; 15; 398; 2023; MDPI
- 12 .Almomani, Mohammad S; Ahmed, Naser M; Rashid, Marzaini; Ibnaouf, Khalid Hassan; Aldaghri, Osamah A; Madkhali, Nawal; Cabrera, Humberto; ; Performance Improvement of Graded Bandgap Solar Cell via Optimization of Energy Levels Alignment in Si Quantum Dot, TiO₂ Nanoparticles, and Porous Si; *Photonics*; 9;

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13 .Aldaghri, O; Modwi, A; Idriss, Hajo; Ali, MKM; Ibnaouf, KH; ; Cleanup of Cd II from water media using Y2O3@ gC3N4 (YGCN) nanocomposite; Diamond and Related Materials; 129; 109315; 2022; Elsevier

14 .Mohammed, Murtala Uba; Badamasi, Murtala M; Usman, Fahad; Zango, Zakariyya Uba; Dennis, John Ojur; Aljameel, Abdul'aziz I; Mohammed Ali, Mohammed Khalil; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; Hussein, Tasneem Mohammed; ; Towards Urban Sustainability: Developing Noise Prediction Model in an Informal Setting; Applied Sciences; 12; 9071; 2022; MDPI

15 .Aljaafreh, Mamduh J; Osman, MM; Prasad, Saradh; AlSalhi, Mohamad S; Aldaghri, Osamah; Tarawneh, Mou'ad A; ; TD-DFT and optical properties of 9, 9-dioctyl-9Hfluorene-based oligomer in a thin film and design of DFB laser using ellipsometry studies; Journal of Materials Science: Materials in Electronics; 33; 22913-22925; 2022; Springer US

16 .Dennis, John Ojur; Adam, Abdullahi Abbas; Ali, MKM; Soleimani, Hassan; Shukur, Muhammad Fadhullah Bin Abd; Ibnaouf, KH; Aldaghri, O; Eisa, MH; Ibrahim, MA; Bashir Abdulkadir, Abubakar; ; Substantial Proton Ion Conduction in Methylcellulose/Pectin/Ammonium Chloride Based Solid Nanocomposite Polymer Electrolytes: Effect of ZnO Nanofiller; Membranes; 12; 706; 2022; Multidisciplinary Digital Publishing Institute

17 .Zango, Zakariyya Uba; Dennis, John Ojur; Aljameel, AI; Usman, Fahad; Ali, Mohammed Khalil Mohammed; Abdulkadir, Bashir Abubakar; Algessair, Saja; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; ; Effective Removal of Methylene Blue from Simulated Wastewater Using ZnO-Chitosan Nanocomposites: Optimization, Kinetics, and Isotherm Studies; Molecules; 27; 4746; 2022; Multidisciplinary Digital Publishing Institute

18 .Almamari, Mohammed Rashid; Ahmed, Naser M; Holi, Araa Mebdir; Yam, FK; Al-Abri, Mohammed Z; Almessiere, MA; El-Badry, Basma A; Ibrahim, MA; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; ; Photoconversion efficiency of In2S3/ZnO core-shell heterostructures nanorod arrays deposited via controlled SILAR cycles; Heliyon; 8; e09959; 2022; Elsevier

19 .Adam, Abdullahi Abbas; Ali, Mohammed Khalil Mohammed; Dennis, John Ojur; Soleimani, Hassan; Shukur, Muhammad Fadhullah Bin Abd; Ibnaouf, Khalid Hassan; Aldaghri, Osamah A; Ibrahim, Moez A; Abdel All, Naglaa FM; Bashir Abdulkadir, Abubakar; ; Innovative Methylcellulose-Polyvinyl Pyrrolidone-Based Solid Polymer Electrolytes Impregnated with Potassium Salt: Ion Conduction and Thermal Properties; Polymers; 14; 3055; 2022; Multidisciplinary Digital Publishing Institute

20 .Aldaghri, O; Modwi, A; Idriss, Hajo; Mustafa, Bakheit; Ali, MKM; Ibnaouf, KH; ; Photodecolorization of synthetic dye Congo red from the aquatic system by CaMgO2@ g-C3N4 nanocomposite; ; ; 2022 ;

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22 .Ahmed, AA; Aldaghri, O; Salih, EY; Ramizy, A; Madkhali, N; Alinad, T; Ibnaou, KH; Eisa, MH; ; Optical characteristics of Al-doped ZnS thin film using pulsed laser deposition technique: the effect of aluminum concentration.; Chalcogenide Letters; 19; ; 2022 ;

23 .Asemi, Nassar N; Aljaafreh, Mamduh J; Prasad, Saradh; Aldawood, Saad; AlSalhi, Mohamad S; Aldaghri, Osamah; ; Efficient liquid scintillator loaded with a light-emitting conjugated oligomer for beta-and gamma-ray spectroscopic measurements; Radiation Measurements; 156; 106826; 2022; Pergamon

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27 .Aldaghri, Osamah A; El-Badry, Basma A; Ali, Mohammed Khalil M; Ibnaouf, Khalid H; ; Effect of Gamma Irradiation on the Optical Properties of the Conjugated Copolymer B-co-MP; Applied Sciences; 12; 1606; 2022; MDPI

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29 .Almomani, Mohammad S; Ahmed, Naser M; Rashid, Marzaini; Suardi, Nursakinah; Almessiere, Munirah A; Madkhali, Nawal; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; ; Photovoltaic Performance of Spherical TiO₂ Nanoparticles Derived from Titanium Hydroxide Ti (OH) 4: Role of Annealing Varying Temperature; Energies; 15; 1648; 2022; MDPI

30 .Salih, Ethar Yahya; Ramizy, Asmiet; Aldaghri, Osamah; Mohd Sabri, Mohd Faizul; Madkhali, Nawal; Alinad, Tarfah; Ibnaouf, Khalid Hassan; Eisa, Mohamed Hassan; ; In-Depth Optical Analysis of Zn (Al) O Mixed Metal Oxide Film-Based Zn/Al-Layered Double Hydroxide for TCO Application; Crystals; 12; 79; 2022; Multidisciplinary Digital Publishing Institute

31 .Al-Balushi, Mohamed Abdulsattar; Ahmed, Naser M; Zyoud, Samer H; Mohammed Ali, Mohammed Khalil; Akhdar, Hanan; Aldaghri, Osamah A; Ibnaouf, Khalid Hassan; ; Ionization Radiation Shielding Effectiveness of Lead Acetate, Lead Nitrate, and Bismuth Nitrate-Doped Zinc Oxide Nanorods Thin Films: A Comparative Evaluation; Materials; 15; 3; 2021; MDPI

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33 .Almomani, Mohammad S; Ahmed, Naser M; Rashid, Marzaini; Ali, MKM; Akhdar, H; Aldaghri, O; Ibnaouf, KH; ; Enhancement of Temperature Fluorescence Brightness of Zn@ Si Core-Shell Quantum Dots Produced via a Unified Strategy; Nanomaterials; 11; 3158; 2021; Multidisciplinary Digital Publishing Institute

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35 .Al Diab, Abdul Rahman Ibrahim; Masilamani, Vadivel; Kalaivani, Rudran; Sivaji, Krishnan; Al Salhi, Mohammad; Habib, Fawzia; Sagheir, Ahmed; El Enezer, Jaysingh; Al Daghri, Osamah; Raja, H; ; Detection of cancer of pancreas by native fluorescence of blood components: a preliminary report; New Emirates Medical Journal; 25; 29-38; 2007 ;

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282; 2021; Springer US

38 .Abdelrahim, MS; Haroun, Kh M; Alfaki, AH; Bush, HS; Aldaghri, O; Eisa, MH; ; EFFECTIVE ATOMIC NUMBERS AND ELECTRON DENSITIES OF GEL DOSIMETERS FOR He, B, C, AND O HIGHLY CHARGED PARTICLES INTERACTION IN THE ENERGY RANGE 10 keV-100 MeV.; Digest Journal of Nanomaterials & Biostructures (DJNB); 16; ; 2021 ;

39 .Mustapha, N; Rafea, M Abdel; Aldaghri, O; Abdelaziz, B Ben; Ibnaouf, KH; ; Influence of ZnO nanoparticles on the performance of LED based on oligomer thin films; Journal of Materials Science: Materials in Electronics; 32; 5473-5481; 2021; Springer US

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41 .Abdulkadir, Bashir Abubakar; Ojur Dennis, John; Al-Hadeethi, Yas; Shukur, Muhammad Fadhullallah Bin Abd; Mkawi, Elmoiz Marghni; Al-Harbi, Nuha; Ibnaouf, Khalid Hassan; Aldaghri, Osamah; Usman, Fahad; Abbas Adam, Abdullahi; ; Optimization of the Electrochemical Performance of a Composite Polymer Electrolyte Based on PVA-K₂CO₃-SiO₂ Composite; Polymers; 13; 92; 2020; MDPI

42 .Abdalla, Adam Sulieman Ibrahim; Abdelmajid, Suliman Alameen; Hamed, Mohamed Saeid Gabreel; Eisa, Mohamed Hassan; Aldaghri, Osama; ; Single-photon pulse transport in a waveguide coupled with a quantum system; Results in Optics; 1; 100026; 2020; Elsevier

43 .Arabia, Saudia; Omdurman, Sudan; ; THE EFFECT OF GOLD NANOPARTICLES ON RADIATION DOSE DISTRIBUTION IN BREAST CANCER USING MONTE CARLO SIMULATION; Journal of Optoelectronic and Biomedical Materials Vol; 12; 101-108; 2020 ;

44 .Usman, Fahad; Dennis, John Ojur; Mkawi, EM; Al-Hadeethi, Yas; Meriaudeau, Fabrice; Ferrell, Thomas L; Aldaghri, Osamah; Sulieman, Abdelmoneim; ; Investigation of Acetone Vapour Sensing Properties of a Ternary Composite of Doped Polyaniline, Reduced Graphene Oxide and Chitosan Using Surface Plasmon Resonance Biosensor; Polymers; 12; 2750; 2020; Multidisciplinary Digital Publishing Institute

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46 .ABDALLA, ASI; Dafalla, AM; Eisa, MH; Aldaghri, O; KAOUD, AMAL; ; MODELING AND OPTIMIZATION OF THIN-FILM SOLAR THERMOELECTRIC COOLING DEVICES; DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES; 15; 569-577; 2020; INST MATERIALS PHYSICS NATL INST R&D MATERIALS PHYSICS, ATOMISTILOR STR, 105...

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52 .Ibnaouf, KH; Taha, Kamal K; Idriss, Hajo; Aldaghri, O; ; Amplified Spontaneous Emission (ASE) Properties of a laser dye (LD-473) in solid state; Journal of the European Optical Society-Rapid Publications; 13; 45047; 2017; SpringerOpen

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59. Burt, Daniel; Aldeek, Waseem; Aldaghri, Osamah A; Ikonic, Zoran; Querin, Oswaldo M; Kelsall, Robert W; ; Design and optimisation of suspended strained germanium membranes for near-infrared lasing (Conference Presentation); Silicon Photonics and Photonic Integrated Circuits V; 9891; 105-105; 2016; SPIE