

## **1. Name**

Moneeb T. M. Shatnawi

## **2. Education**

- Ph. D., Physics (Materials Physics), Michigan State University, USA, 2007.
- M.Sc., Physics, Yarmouk University, Jordan, 2001.
- B.Sc., Physics, Yarmouk University, Jordan, 1998.

## **3. Academic experience**

- The University of Jordan, Associate Professor, 2016 – Present, full time.
- The University of Jordan, Assistant Professor, 2008 – 2016, full time.
- Michigan State University, Research Assistant, 2005 – 2007.
- Michigan State University, part-time, Teaching Assistant, 2004 – 2005.
- The University of Jordan, Teaching Assistant, 2002 – 2003, full time.

## **4. Non-academic experience**

- Excellent experience in performing synchrotron-bases XRD and XAFS experiments.
- XRD and XAFS samples preparation and measurements.
- Excellent experience in using XRD and XAFS data analysis and modeling softwares.

## **5. Certifications or professional registrations**

- Registered user of the Advanced Photon Source (APS), Argonne National Lab., Chicago, IL, USA.

## **6. Current membership in professional organizations**

- Member of the administrative board of the Jordan Physical Society.

## 7. Honors and awards

- Awarded a full time research assistant fellowship from Physic and Astronomy Department at Michigan State University, MI, USA, 2005 – 2007.
- Awarded a part time teaching assistant fellowship from Physic and Astronomy Department at Michigan State University, MI, USA, 2004 – 2005.
- Awarded a scholarship from The University of Jordan for Ph. D., 2003 – 2005.
- Dean's honor list for excellent GPA, Faculty of Science, Yarmouk University, Jordan, 1997 – 1998.

## 8. Service activities

- Judge at “Innovation for Creativity Development Association – Ebtikar” for many years, 2017 – 2020. The University of Jordan, Amman, Jordan.
- Member of the organizing committee, 9<sup>th</sup> International Petra School of Physics, "Nano Physics: Fundamentals and Applications", The University of Jordan, Amman, Jordan, 9 – 12, October, 2018.
- Member of the organizing committee of the Fourth International Symposium on Dielectric Materials and Applications (ISYDMA'4), The University of Jordan, Amman, Jordan, 2 – 4 May, 2019.
- Member or coordinator of several committees at Physics Department and School of Science at The University of Jordan.

## 9. Briefly list the most important publications and presentations from the past five years

- Toward an Understanding of the Anisotropy in Hcp Zinc Metal: Total Scattering Structural Study Using Synchrotron-Based, Temperature-Dependent, X-Ray Pair Distribution Function, Jordan Journal of Physics 17 (1), 7-15, 2024.
- Field electron emission from tungsten micro-tips coated with various thicknesses of polystyrene nanolayers: Characteristics & analysis, Ultramicroscopy 244, 113643 3, 2023.
- Ab initio simulation of amorphous GeSe<sub>3</sub> and GeSe<sub>4</sub>, Journal of Non-Crystalline Solids 601, 121998 5, 2023.
- High optical stability of reusable radiochromic polyvinyl alcohol-iodine gel dosimeter for radiotherapy, Radiation Physics and Chemistry 199, 110338 6, 2022.
- Real space study of local bonding for zinc structure based on temperature-dependent x-ray pair distribution function analysis, AIP Advances 12 (9), 2022.
- Influence of polystyrene layer on the field electron emission performance of nano-apex carbon fibre emitters, Advances in Materials and Processing Technologies 8 (3), 2775-2794 3, 2022.
- Investigation of the structural, morphological, and magnetic properties of small crystalline Co–Cu ferrite nanoparticles in the single-domain regime, AIP Advances 12 (6) 3, 2022.
- Improved Dose Response of N-(hydroxymethyl)acrylamide Gel Dosimeter with Calcium

Chloride for Radiotherapy, Gels 8 (2), 78-11, 2022.

- Field Electron Emission Characteristics of Tungsten-Polyethylene Composite Materials as a Source of Electron Emission, Jordan Journal of Physics 15 (5), 441-449, 2022.
- Improved performance of N-(Hydroxymethyl) acrylamide gel dosimeter using potassium chloride for radiotherapy, Radiation Measurements 142, 106542, 13, 2021.
- Total-scattering pair-distribution function analysis of zinc from high-energy synchrotron data, Modern Physics Letters B 33 (33), 1950410, 2019.

**10. Briefly list the most recent professional development activities**

- Attended many professional development workshops held by "Accreditation and Quality Assurance" center at The University of Jordan.
- Attended many professional development workshops held by "Innovation and Entrepreneurship" center at The University of Jordan.
- I got a fund from the Deanship of Scientific Research at The University of Jordan to establish a research laboratory at the Department of Physics in The University of Jordan, where I brought a set of new computers equipped with the necessary softwares to facilitate work environment for graduate students interested in materials local structural modeling and simulation techniques.