

CURRICULUM VITAE

Feras Afaneh

(Atomic and Molecular Spectroscopy)

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SHORT SUMMARY OF ACCOMPLISHMENTS

- 36 publications of peer reviewed or invited articles.
- 1162 citations, H- index is 13, i10 index is 14 (Google Scholar)
- 851 citations H- index is 12 (SCOPUS)
- 32 invited talks at conferences and colloquia at various institutions, 19 contributed presentations
- Visiting or adjunct appointments at Frankfurt University/Germany and Lund University/Sweden.
- Organization of 12 international conferences, workshops and meetings.
- Editorial and review services for several international journals
- Member of the DAAD selection committee of DAAD PhD scholarships for Jordanian students (2006 and 2007).
- International Atomic Energy Agency (IAEA) Fellowship Award, Vienna, Austria (2007- 2008).
- Certificate of Distinction in Teaching and Research, Hashemite University, Jordan (2007).
- Mercator Professorship Award (German Research Foundation /DFG), Visiting Professor at Physics Department, Frankfurt University, Germany, 2011- 2012.
- Fulbright Scholar, Advanced Light Source (ALS), University of California, Berkeley, CA, USA (2019-2020).
- Received research fellowships and scholarships from prestigious organizations like the German Research Foundation /DFG , DAAD, ERASMUS, World Academy of Science (TWAS)...etc.

EDUCATION

1997-2001:	Ph.D.	Atomic and Molecular Spectroscopy	Frankfurt University, Germany
1991-1994:	M. Sc.	Physics/Material Science	University of Jordan
1986-1990:	B. Sc.	Physics	University of Jordan

PUBLICATIONS

- “*Physical, Structural, Optical Investigation and Shielding Features Of Tungsten Bismuth Tellurite Based Glasses*”, Journal of Non-Crystalline Solids 504, 158 (2019).
- “*Temperature and Frequency Effect On The Electrical Properties Of Bulk Nickel Phthalocyanine Octacarboxylic Acid (Ni-Pc(COOH)₈)*”, Applied Physics A 125, 7 (2019).
- “*Imaging of strong field dissociative single and double ionization channels of N₂O*”, International Journal of Modern Physics B 31, 1750215 (2017).
- “*Delocalization of a Vacancy across Two Neon Atoms Bound by the van der Waals Force*”, Phys. Rev. Lett. 117, 263001 (2016).
- “*First results from the Jordan COLTRIMS imaging system*”, Nuclear Instruments and Methods in Physics Research Section B 380, 84–89 (2016).
- “*Relativistic Configuration Interaction Calculations of Multi-Pole Transitions Rates and Spectra of ArI and ArII*”, Advanced Studies in Theoretical Physics, 10, 5, 235 – 266 (2016).
- “*Radioactivity concentrations and dose assessment for agricultural soil samples around the petroleum refinery in Zarqa, Jordan*”, International Journal of Low Radiation, 10, 3, 234–243 (2016).
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- “*Synchrotron Radiation-Based Techniques in Archaeological and Cultural Heritage Sciences: XFM Beamline at SESAME Synchrotron*”, Proceedings of First International Conference on Tourism Management and Heritage Conservation, Hashemite University, Jordan (2016).
- “*Multi-elemental Analysis of Pharmaceuticals Derived from Plant Seeds by Energy Dispersive X-Ray Fluorescence Spectrometry*”, Instrumentation Science & Technology 44, 1, 98-113 (2016).
- “*Molecular Dynamics of NH₃ Induced by Core-Electron Excitation*”, Phys. Chem. Chem. Phys. 17, 18944-18952 (2015).
- “*COLTRIMS Imaging of Molecular Fragmentation Dynamics of CO Molecules Induced by Slow He²⁺ Ions*”, JJP 8, 2, 87-93 (2015).
- “*Rapid Bond Rearrangement in Molecules after Core-electron Excitation*”, Journal of Physics **488**, 012006 (2014).
- “*Ultrafast Energy Transfer between Water Molecules*”, Nature Physics 6, 139 - 142 (2010).
- “*Interference in Collisions between Helium and Hydrogen Molecular Ions*”, Journal of Physics **194**, 102018 (2009).
- “*Young-Type Interference in Collisions between Helium and Hydrogen Molecular Ions*”, Phys. Rev. Lett. 101, 173202 (2008).
- “*Investigation of the Activity Concentrations of ²³⁸U, ²²⁶Ra, ²²⁸Ra, ²¹⁰Pb AND ⁴⁰K in Jordan Phosphogypsum and Fertilizers*”, Radiation Protection Dosimetry, 131(4):449-54 (2008).

- “*Orientation and impact-parameter dependence of dissociative ionization of H₂ by slow ion impact*”,
Journal of Physics B: Atomic, Molecular and Optical Physics 40, 3467-3475, (2007).
- “*Dynamics of Electron-Capture-to-Continuum (ECC) Formation in Slow Ion -Atom Collisions*”, Journal of Physics B: Atomic, Molecular and Optical Physics, 40, 1745-1753, (2007).
- “*Imaging of Continuum States of the He₂²⁺ Quasi Molecule*”, Physical Review A: Atomic, Molecular and Optical Physics, 76, 012703-1-9, (2007).
- “*Exposure to Radiation from Natural Radioactivity in Jordanian Building Materials*”, Radiation Protection Dosimetry, 118, 93-96, (2006).
- “*Experimental Investigation of the Ionization Dynamics in Slow p-H₂ Collisions*”, Nucl. Instrum. Methods Phys. Res. B, 234, 431-440, (2005).
- “*Fully Differential Study of Transfer Ionization Processes: a View into Correlated Many Particle Dynamics*”, Physica Scripta, T110, 379-383, (2004).
- “*Atomic Structure Dependence of Nonsequential Double Ionization of He, Ne and Ar in Strong Laser Pulses*”, Journal of Physics B: Atomic, Molecular and Optical Physics, 37, L161-L167, (2004).
- “*Many-Particle Dynamics in Atomic and Molecular Physics Investigated with the COLTRIMS-Technique: New Inside into e-e- Correlation*”, Nuclear Physics A, 737, 306-313, (2004).
- “*Electrical Properties of Macromolecular Complexes of Coordinated Polymers with Mixed Valence of Co(II), Co(III) and Co (II-III)*”, Polymer International, 52, 1125-1130, (2003).
- “*Dynamics of Secondary Ion Emission: Novel Energy and Angular Spectrometry*”, Nucl. Instrum. Methods Phys. Res. B, 193, 762-767, (2002).
- “*Must Saddle Point Electrons Always Ride on the Saddle?*”, Journal of Physics B: Atomic, Molecular and Optical Physics, 35, L229-235, (2002).
- “*Abrupt Rise of the Longitudinal Recoil Ion Momentum Distribution for Ionizing Collisions*”, Physical Review Letter, 86, 224-227, (2001).
- “*Kinematically Complete Investigation of Momentum Transfer for Single Ionization in Fast Proton-Helium Collisions*”, Journal of Physics B: Atomic, Molecular and Optical Physics, 33, 3331-3344, (2000).
- “*Recoil Ion Momentum Distributions for Single and Double Ionization of Helium in Strong Laser Fields*”, Physical Review Letter, 84, 443-446, (2000).
- “*Sequential and Nonsequential Contributions to Double Ionization in Strong Laser Fields*”, Journal of Physics B: Atomic, Molecular and Optical Physics, 33, L127-133, (2000).