

Curriculum Vitae

1. Name and date of birth:

Ali Al-Zu'bi, 05.04.1980

2. Academic Rank:

Visiting Assistant Professor of Mathematics and Physics

3. Degrees:

- **PhD.** of natural Sciences, RWTH-Aachen, May 2010
- **MSc.** of Physics, University of Stuttgart, Jan. 2006
- **BSc.** of Applied Physics, Jordan University of Science & Technology, Feb.2002

4. Service at this Institution:

- **Aug. 2021** Visiting Assistant Professor of Mathematics and Physics-full time
- **Mar.-Jun. 2021:** Adjunct Faculty

5. Professional Experience:

- **Sep. 2017 - Feb. 2020:** Delegated Lecturer, PAAET/Kuwait
- **Sep.2015 - Jun.2017** Assistant Professor of Physics, AUM/Kuwait
- **Feb.2015-Aug.2015** Guest Scientist, Max-Planck-Institute for Iron Research/Germany
- **Jul.2012-Feb.2015** Postdoc, Research Center Julich/Germany
- **Sep.2011-Nov.2011** Guest Scientist, KAUST/Saudi Arabia
- **Nov.2009-Oct.2011** Postdoc, Max-Planck-Institute for Iron Research/Germany

6. Publications:

a) Journals: (Selected)

- **2019:** Electronic Structure of Oxygen-Deficient SrTiO₃ and Sr₂TiO₄ (DOI: <https://doi.org/10.3390/cryst9110580>)
- **2016:** Ab initio Prediction of Martensitic and Intermartensitic Phase Boundaries in Ni-Mn-Ga (DOI: <https://doi.org/10.1103/PhysRevLett.116.025503>)
- **2015:** Local Density of States at Metal-Semiconductor Interfaces: An Atomic Scale Study (DOI: <https://doi.org/10.1103/PhysRevLett.114.146804>)
- **2014:** Long-range magnetic coupling between nanoscale organic–metal hybrids mediated by a nanoskyrmion lattice (DOI: <https://doi.org/10.1038/nnano.2014.235>)

b) Conferences: (Selected)

- **Mar. 2014:** Annual spring meeting of German Physics Society (DPG), Dresden/Germany (**Talk:** Vacancy-vacancy interaction in SrTiO₃ bulk and surfaces)
- **Oct. 2013:** Functional oxides for emerging technologies workshop, Bremen/Germany (**Poster:** Ab initio study of defects in SrTiO₃ bulk and (100) surfaces)
- **Mar. 2013:** Annual spring conference of German Physics Society (DPG), Regensburg/Germany (**Talk:** Ab initio study of defects in SrTiO₃ surfaces)

c) Books:

2010: “Ab Initio Investigations of Magnetic Properties of Ultrathin Transition Metal Films on 4d Substrates” Author: Ali Al-Zubi (ISBN 978-3-89336-641-5)

7. Membership in Professional Societies:

German Physics Society

8. Courses taught:

a) Academic Courses (Recent 3 academic years):

Summer 2022 (AUK):

- **Preparatory Mathematics (MATH095):** 1 section, 5 hours/week/section
- **Mathematics for Business (MATH103):** 1 section, 5 hours/week/section

Spring 2022 (AUK):

- **Preparatory Mathematics (MATH095):** 1 section, 3 hours/week/section
- **Calculus-II (MATH203):** 1 section, 3 hours/week/section
- **General Physics-I (PHYS115):** 1 section, 3 hours/week/section

Fall 2021 (AUK):

- **College Algebra (MATH100):** 2 section, 3 hours/week/section
- **Mathematics for Business (MATH103):** 2 section, 3 hours/week/section
- **Differential Equations (MATH210):** 1 section, 3 hours/week/section

Spring 2021 (AUK):

- **Preparatory Math (MATH095):** 2 sections, 3 hours/week/section
- **Introduction to Astronomy (PHYS110):** 1 section, 3 hours/week/section

Summer 2019 (PAAET):

- **Physics of Sound & Acoustics (PHYS103):** 1 section, 5 hours/week/section
- **Physics of Sound & Acoustics (GP113):** 1 section, 5 hours/week/section

b) Intensive professional short courses:

- **Feb 2019:** Physics preparation, British Aviation Center (BAC), 1 week
- **Feb 2019:** Math Preparation, British Aviation Center, 1 week

9. Other Duties:

Committee of Environmental Engineering Program

10. Research Projects:

- **Jul 2012-Feb 2015:** Local confinement of switching filaments in transition metal oxides in electrical, chemical, and mechanical gradients.
- **Nov2009-Oct 2011:** Ab initio Investigation of Temperature Dependent Effects in Magnetic Shape Memory Heusler Alloys
- **Jun 2006-Jul 2009:** Ab initio investigations of magnetic properties of ultrathin transition-metal films on 4d substrates.

11. Participation in Specific Programs:

- **01.-10.11.2021:** Time Managements & Effective Meeting, HR (AUK), E-Learning
- **01.-10.-2021:** MS Teams, HR (AUK), E-Learning
- **24.03.2021:** Adventures in eLearning Assessment: The Infographic, The Podcast, The Annotated Text and the Play List Workshop (AUK)

- **05.04.2021:** The Human Connection in Education Workshop (AUK)
- **07.04.2021:** Electronic Assessment: How to use Google forms to create flexible and effective online assessment Workshop (AUK)
- **21.04.2021:** Increasing Student Engagement: Introducing Course Badges Workshop (AUK)
- **05.05.2021:** Active Learning in the Online Classroom Workshop (AUK)
- **17.05.2021:** How to Integrate Information Literacy Instruction in Your Course Workshop (AUK)
- **02.06.2021:** Encouraging Student Engagement Workshop (AUK)