

MOUSA, AHMAD BADEELHAY



PERSONAL INFORMATION

Title:	Faculty member
Academic Rank:	Associate Professor
Date & Place of Birth:	1976, Kuwait
Nationality:	Jordanian
Address:	Jordan/ Amman
Phone No.:	00962797858365
e-mail:	amousa@meu.edu.jo

ACADEMIC QUALIFICATIONS

Duration	Degree	Ph.D
2004-2009	University: The University of Jordan Country : Jordan Field : Theoretical Condensed Matter Physics	
Duration	Degree	MSc
1999-2002	University: The University of Jordan Country: Jordan Field: Physics	

Duration 1994-1998
Degree Bsc
University: Al-Anbar University
Country: Iraq
Field: Physics

TEACHING EXPERIENCE

Duration 2014- Present
Position : Associate Professor
Organization: MEU
Duties: Taught Physics (1&2), Dynamics, Statics, Numerical Techniques and Differential Equation.
Counseled students when adjustment and academic problems arose. Prepared, administered, and corrected tests, kept attendance and grade records.

Duration 2010-2014
Position: Assistant Professor
Organization: The University of Jordan
Duties: Taught Physics (1&2), Math (1&2), Dynamics, Statics, Numerical Techniques and Differential Equation.
Counseled students when adjustment and academic problems arose. Prepared, administered, and corrected tests, kept attendance and grade records.

Duration 2005-2008
Position: Lecturer
Organization: The University of Jordan
Duties: Taught Laboratory Physics 111, 112, and 113.

Duration 2012-2013
Position: Teaching Assistance
Organization: The University of Jordan
Duties: work in theoretical physics lab, Assisted in some calculation for theoretical research

TRAINING COURSES ATTENDED

	Date	Location	Title
1	Nov , 2010	Center for Theoretical and Applied Physical Sciences, Irbid, Jordan	First Yarmouk School for Computational Condensed Matter and Nano Systems.
2	Aug, 2009	Center for Theoretical and Applied Physical Sciences, Irbid, Jordan	Workshop on Computational Physics Using the Wienzk packag.

TRAINING COURSES OFFERED					
	Date	Location	Title		
	Nov 2016	MEU, Amman, Jordan	Preparation and development of study plans		
PUBLICATIONS					
JOURNALS					
	Title	Journal	Issue	Pages	Year
1	First principles investigation of thermoelectric and mechanical properties of VScO ₃ semiconductor perovskite for sustainable and renewable energy	Results in Physics	18	103331	2020
2	Ab-initio study of the structural, electronic and magnetic properties of double-perovskite Sr ₂ BUO ₆ (B = Mn, Ni, and Zn) compounds	Physica B: Condensed Matter	595	412361	2020
3	Ab initio studies of the structural, elastic, electronic and optical properties of the Ni ₃ In intermetallic compound	Materials Chemistry and Physics	249	123104	2020
4	Thermoelectric properties of ALiF ₃ (A= Ca, Sr and Ba): First-principles calculation	Jordan Journal of Physics	13(1)	79	2020
5	Effect of the “3-d” band filling on the structural, electronic, magnetic and optical properties of TMSco ₃ perovskite	Chinese Journal of Physics	65	500	2020
6	Theoretical investigation of the structural, electronic and elastic properties of TM ₃ In(TM=Pd and Pt) intermetallic compounds	AIP Advances	10	065317	2020
7	Structural, electronic, mechanical and elastic properties of Scandium Chalcogenides by first-principles calculations	Phase Transitions	93(8)	773	2020
8	Ab-initio calculations of the structural, mechanical, electronic, magnetic and thermoelectric properties of Zr ₂ Rh _x (x= Ga, In) Heusler alloys	Physica B: Condensed Matter	581	411941	2020
9	Structural, magnetic, electronic and elastic properties of half-metallic ferromagnetism full-Heusler alloys: Normal-Co ₂ TiSn and inverse- Zr ₂ RhGa using FP-LAPW method	Materials Chemistry and Physics	240	122122	2020

10	Ab-initio investigations of the structural, electronic, magnetic and optical properties of $Ca_{1-x}Eu_xLiF_3$ fluoroperovskite	Computational Condensed Matter	21	e00432	2019
11	Effect of rare earth element Eu on structural, electronic, magnetic, and optical properties of fluoroperovskite compound $SrLiF_3$ first principals calculations	Physica B: Condensed Matter	564	37	2019
12	First principle investigation of the structural, electronic and elastic properties of the laves phase compounds SrX_2 (X=Pt and Pd)	Chinese Journal of Physics	59	210	2019
13	First principles study of the structural, Electronic, Magnetic and thermoelectric properties of Zr_2RhAl	Physica B: Condensed Matter	552	235	2019
14	Investigation of the perovskite $KSrX_3$ (X = Cl & F) compounds, examining the optical, elastic, electronic and structural properties: FP-LAPW study	Journal of Electronic Materials	47	641	2018
15	Structural, Elastic, Electronic and Optical Properties of $SrTMO_3$ (TM = Rh, Zr) Compounds: Insights from FP-LAPW Study	Materials	11	2057	2018
16	Insight into the structural, electronic, elastic and optical properties of the alkali hydride compounds, XH (X = Rb and Cs)	AIP Advances	8	045017	2018
17	Theoretical investigation of the structural stabilities, elastic properties and band structure characteristics of platinum carbide	Phase Transitions	91	271	2017
18	Structural, electronic and magnetic properties of $Ti_{1+x}FeSb$ Heusler alloys	Intermetallics	85	197	2017
19	Structural stabilities and band structure characteristics of platinum nitride (PtN) via first-principles calculations	Chinese Journal of Physics	55	211	2017
20	Optical dispersion functions of $Co_{2-x}Eu_xVSn$ using ab-initio calculations	International Journal of Modern Physics B	29	1550195	2015
21	Structural, electronic and elastic properties of the $B2-ScM$ (M=Au, Hg and Tl) intermetallic compounds: Ab initio calculations	International Journal of Computational Materials Science and Engineering	4	1550020	2015
22	First principles study of $KCaX_3$ (X= F and Cl) compounds	International Journal of Modern Physics B		1450139	2014

23	The energetic, electronic and magnetic structures of $Fe_{2-x}Co_xVSn$ alloys: Ab-initio calculations	Physica B: Condensed Matter	430	58-63	2013
24	First Principles Study of Structural, Electronic and Optical Properties of the Fluoroperovskite $RbCaF_3$ Crystal	American Journal of Condensed Matter Physics	3	151-162	2013
25	The electronic and optical properties of the fluoroperovskite $XLiF_3$ (X= Ca, Sr, and Ba) compounds	Computational Materials Science	79	201-205	2013
26	Magnetic map of MnPd overlayers on Co(001) and Co(111): Ab initio studies	Surface Science	613	80-87	2013
27	The effect of defects on the electronic and magnetic properties of the Co_2VSn full Heusler alloy: Ab-initio calculations	Intermetallics	33	33-37	2013
28	Electronic, Elastic Structure and Phase Stability of TaRu Shape Memory Alloys	American Journal of Condensed Matter Physics	3	1-8	2013
29	The electronic and optical properties of the fluoroperovskite $BaXF_3$ (X= Li, Na, K, and Rb) compounds	Computational Materials Science	59	6-13	2012
30	Structure, electronic and elastic properties of the NbRu shapememory alloys	Eur Phys. J. B: Condensed Matter and Complex Systems	72	575-581	2009

CONFERENCES

	Title	Conference	Location	Date
1	Structural, Electronic and Magnetic Properties of $Ti_{1+x}FeSb$ and $TiFe_{0.75}M_{0.25}Sb$ (M=Ni, Mn) Heusler Alloys	APS March Meeting 2016, abstract id. T1.148	USA	2016

MEMBERSHIPS

Membership	Location	Date
Association of Jordanian Physicists	Jordan	2016

COMMITTEES

Committee	Location	Date
Chairman, Committee of study plans/ university scale,	MEU	2016-2019
Chairman, Committee for the equivalency of courses/ university scale	MEU	2016-2019
Member, Scientific Research Council, MEU	MEU	2016-2019
Member, Graduate Studies Council, MEU	MEU	2016-2019
Chairman of the Examinations Committee, Faculty of Arts and Sciences	MEU	2014-2016
Member of Scientific Research Committee.	MEU	2017-2019
Member of the Graduate Studies Committee.	MEU	2014-2019

PROFESSIONAL EXPERIENCE

Duration	Position: Dean of faculty of arts and sciences
2016 – 2019 2020-	Organization: MEU Duties: Management of Academic and Administrative Affairs at the faculty.
Duration	Position: Head of Basic Sciences Department
2014 – 2016	Organization: MEU Duties: Management of Academic and Administrative Affairs at the Department.
Duration	Position: Assistant Dean for Quality Assurance
2012 – 2014	Organization: MEU Duties: Follow up on quality and quality assurance in Faculty

RESEARCH INTERESTS

Theoretical Condensed Matter physics and Complex Systems.

LANGUAGES

Arabic
English

COMMUNITY ACTIVITIES

AWARDS RECEIVED

Received meritorious awards in BSc course.
Distinguished Researcher (2018).

REFERENCES

Name: Jamil M. Khalifeh, Prof. Dr.
Physics Department
University of Jordan
Amman-11942, Jordan
Tel: +962 777 423914
E-mail: jkalifa@ju.edu.jo

Name: Moh. R. Kharabsheh, Dr.
Alpalqaa Applied University
Amman-11610, Jordan
Tel: +962 6 4790222
E-mail: msuliman@meu.edu.jo

Name: Hassan K. Juwhari, Prof. Dr.
Physics Department
The University of Jordan
Amman-11942, Jordan
Tel: +962 798 020582
E-mail: h.juwhari@ju.edu.jo