



HUDA SALMAN ALKHALDI

POSITION: Assistant Professor

Personal Data

Nationality | Saudi

Date of Birth | 12/08/1977

Department | Physics

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Language Proficiency

Language	Read	Write	Speak
Arabic	✓	✓	✓
English	✓	✓	✓

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
May 2017	PhD	Australian National University	Canberra
February 2007	Master's degree	King Faisal University	Dammam
June 1999	Bachelor's degree	Science college	Dammam



PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD <i>(First class honours)</i>	Porosity in Group IV-IV and III-V Alloys Induced by Ion Irradiation in the Nuclear Stopping Regime
Master	Study the effect of weathering conditions in Kingdom of Saudi Arabia on physical properties of some coating materials

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Assistant Professor	College of Education in Jubail at IAU	2017
Lecturer	College of Education in Jubail at King Faisal university	2009
Demonstrator	College of Education in Jubail	2009



Scientific Achievements

Published Refereed Scientific Researches
(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Study of structural, electronic, magnetic, and optical properties of A_2FeMnO_6 (A= Ba, La) double perovskites, experimental and DFT analysis	Saqlain A Dar, G Murtaza, Taharh Zelai, Ghazanfar Nazir, Huda Alkhalidi, Hind Albalawi, Nessrin A Kattan, M Irfan, Q Mahmood, Z Mahmood
2	Diamond and Related Materials	Graphitic-C ₃ N ₄ @MoO ₃ heterostructure synthesis via a facile green route and their visible light-driven photocatalytic activity for the degradation of Rhodamine B dye	MA Bukhari, MI Khan, Shamsa Kanwal, Mahvish Fatima, H Elhosiny Ali, Huda Alkhalidi, Muhammad Boota, Fatimah M Alzahrani, Siham A Alissa, Munawar Iqbal



3	<p>Gaber A .M.Mersala. HudaAlkhaldi. bGhulam M.Mustafac. Q.Mahmoodd. AbeerMeraef. S.Bouzgarrough. AliBadawiiAbdallah, A. Shaltouta1JohanBomanjMohammed A.Amin</p>	<p>Study of half metallic ferromagnetism and thermoelectric properties of spinel chalcogenides BaCr₂X₄ (X = S, Se, Te) for spintronic and energy harvesting</p>	<p>Journal of Materials Research and Technology Volume 18, May–June 2022, Pages 2831-2841</p>
4	<p>Muhammad Junaid abMuhammad, Azhar Khana Abdul Majeedac. Huda Alkhaldi. dMohamed S.Attiae Mohammed A.Amineg M.Asif Iqbal</p>	<p>Evaluations of structural, thermal, spectral, and magnetic properties of Li_{0.5}Fe_{2.5}O₄ multi magnetic oxide fabricated via sol-gel auto-ignition technique</p>	<p>Ceramics International Volume 48, Issue 15, 1 August 2022, Pages 21610-21615</p>
5	<p>Samah Al-Qaisia, Muhammad Mushtaqb Jamila S.Alzahranic. HudaAlkhaldi. dZ.A.Alrowailie Habib Rachedfg Bakhtiar UIHaqh Q.Mahmoodi M.S.Al-Buriahij Manal Morsik</p>	<p>First-principles calculations to investigate electronic, structural, optical, and thermoelectric properties of semiconducting double perovskite Ba₂YBiO₆</p>	<p>Micro and Nanostructures Volume 170, October 2022, 207397</p>
6	<p>Shahar Bano, Khan, M.I., Albalawi, Hind, Islam, Ghalib ul, Siddique, Muhammad, Ahmad, Tanveer, Alkhaldi, Huda, farhat, lamia ben, Ahson, R. Hussain, Saddam</p>	<p>Effect of Cd doping on the structural, optical, and photovoltaic</p>	<p>Journal of Materials Research and Technology</p>



		properties of SnS films	Volume 19, July–August 2022, Pages 1982-1992
7	Mohamed Madani, Shimaa Hosny, Dalal Mohamed Alshangiti, Norhan Nady, Sheikha A. Alkhursani, Huda Alkhalidi, Samera Ali Al-Gahtany, Mohamed Mohamady Ghobashy, and Ghalia A. Gaber*	Green synthesis of nanoparticles for varied applications: Green renewable resources and energy-efficient synthetic routes	Nanotechnology Reviews(2022) no. 11, 731-759
8	Huda Alkhalidi*, Zinab Alshorafa, Waheedh Albarqi, Manal Alzahrani, Mohamed Madani	POTENTIAL EFFECT OF UV RADIATION ON THE OPTICAL AND ANTI-MICROBIAL PROPERTIES OF PVA/METAL-SALT NANOCOMPOSITES	MTAEC9, 56(1)19(2022)
9	<i>Phys. Rev. C 97, 055202 – Published 4 May 2018</i>	<i>Porosity as a function of stoichiometry and implantation temperature in Ge/Si_{1-x}Ge_x alloys, J. Appl. Phys., 119.9 (2016) 094303</i>	<i>H. S. Alkhalidi, F. Kremer, T. Bierschenk, J.L. Hansen, A. Nylandsted-Larsen, J.S. Williams, and M.C. Ridgway</i>
10	<i>PHYSICAL REVIEW C 96, 035204 (2017)</i>	<i>Erratum: Porosity as a function of stoichiometry and implantation temperature in Ge/Si_{1-x}Ge_x alloys, J. Appl. Phys., 121.4 (2017) 049902</i>	<i>H. S. Alkhalidi, F. Kremer, T. Bierschenk, J.L. Hansen, A. Nylandsted-Larsen, J.S.</i>



			Williams, and M.C. Ridgway
11	PHYSICAL REVIEW C 96, 065201 (2017)	<i>Suppression of ion-implantation induced porosity in germanium by a silicon dioxide capping layer, Appl. Phys. Lett. 109, 082106 (2016)</i>	Tuan T. Tran, Huda S. Alkhaldi , Hemi H. Gandhi, David Pastor, Larissa Q. Huston, Jennifer Wong-Leung, Michael J. Aziz, and J. S. Williams
12	Phys.Lett. B755 (2016) 64-69	<i>The influence of capping layers on pore formation in Ge during ion implantation, J. Appl. Phys., 120.21 (2016): 215706</i>	H. S. Alkhaldi , T. T. Tran, F. Kremer, and J. S. Williams
13	Phys.Rev. C91 (2015) no.5, 055202	<i>Morphology of ion irradiation induced nanoporous structures in Ge and Si_{1-x}Ge_x alloys, J. Appl. Phys., 121.11 (2017): 115705</i>	H. S. Alkhaldi , F. Kremer, J. Hansen, A. Nylandsted-Larsen, P. Mota-Santiago A. Nadzri, D. Schauries and P. Kluth
14	Phys.Lett. B750 (2015) 53-58	<i>Void evolution and porosity under ion irradiation in GaAs_{1-x}Sb_x alloys, J. Phys. D: Appl. Phys., 50.12, 125101</i>	H. S. Alkhaldi , P. Kluth, F. Kremer, M. Lysevych, L. Li, and J. S. Williams
15	Phys.Rev. D91 (2015) no.5, 052014	<i>40th Annual Condensed Matter and Materials Meeting. (Wagga Wagga,</i>	H. S. Alkhaldi , F. Kremer, , J.S.



		<i>February, 2016), Australia, Porosity in Ge and Si_{1-x}Ge_x alloys induced by ion implantation, Proceedings in AIP.</i>	<i>Williams, and M.C. Ridgway</i>
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Prizes:

#	Name of Investigator(s) (Supported by)	PRIZE Title	Report Date
	Dubai- Nanotechnology Conference	Best poster presenter in Nanotechnology conference in Dubai	2009-2011
	Canberra- Australian National University	Present PhD project in three minutes(got first place)	15/8/2014
	Canberra-Australian National University	Distinguish certificate for PhD presentation in 15 minutes	25/9/2016
	Canberra- Saudi Cultural Mission	Prize from Saudi cultural mission for publications	11/11/2016, 22/5/2017



Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	International Renewable Energy Conference	Hail University-5-7/1/2019	Attendance
2	Jubail 2 nd Energy Management conference	King Abdullah cultural center 14-15/1/2019	Attendance
3	First gathering of Renewable energy (Conference) Second gathering of Renewable Energy (Conference)	23-24/4/2018 Engineering College 12-13/3/2019	Attendance
4	Evaluation Commission Conference	Riyadh -23-24/1/2019	
5	40 th Annual Condensed Matter and Materials Meeting	(Wagga Wagga, February, 2016),	Poster presentation
6	International Conference on Nanoscience and Nanotechnology (ICONN)	(Canberra, February, 2016)	Poster presentation
7	International Conference on Ion Beam Modification of Materials (IBMM)	(New Zealand, Wellington, November, 2016)	Poster presentation
8	International Conference on Ion Beam Modification of Materials Workshop	(IBMM) (Canberra, October, 2016)	Oral presentation
9	International Conference on Nanotechnology	(Dubai, March, 2015),	Poster presentation
10	International Conference on Heavy Ion Accelerator Symposium (HIAS)	(Canberra, June, 2014),	Poster presentation



11	Australian Synchrotron Meeting	(Melbourne, November, 2014),	Poster presentation
12	Australian Synchrotron Meeting	(Melbourne, November, 2013),	Poster presentation
13	1 st solar and wind energy symposium and exhibition	Energy engineering college at IAU	presence
14	Program to develop basic competencies in teaching and learning for the university teachers	College of Education – Jubal 2017 /09	Presence
15	workshop on “Implementing Nuclear Training in KSA” in conjunction with The International Institute of Nuclear Energy (I2EN)	on April 25 th 2018 King Abdullah City for Atomic and Renewable Energy	Presence

Membership of Scientific and Professional Societies and Organizations

- **Since 2013** Member of the Researcher gate
- **Since 2009** Member of the **Saudi Physical society**
- **IEEE** **Member**
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Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	General physics 1	PHYS 101 802143	Lecture
2	Basic of physics	PHYS 312	Lecture



3	Advanced practical lab	PHYS 403N 801532	Lab Instructor
4	Electronics	PHYS 306 NR 802247	Lecture
5	Solid state lab		Lab Instructor
6	Atomic spectrum		Lecture
7	Electromagnetism lab		Lab Instructor
8	Optical lab		Lab Instructor
9	Physics 2	PHYS 102	Lecture
10	Electric Circuit	PHRE301	Lecture

Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

1	General Physics 1 – 802143 –This course covers Survey of fundamentals of physics including identify the physical quantities, units, coordinates, and dimensions. Vector and their characteristics the kinematic equations, and laws of motion including Newton's laws.
2	Electronics-802247 -This course describes the principal analog electronic devices such as diodes, bipolar transistors and operational amplifier and studies their principals applications (amplification, stabilization, etc.) starting from semiconductor characteristics.
3	Basic of Physics: The course aims to study fundamental physics topics including (motion in one dimension, forces, sounds, electromagnetism , optics, solar system, types of matter, information about heating)
4	Advanced practical lab– 801532 –It aims to enable students to carry out the practical applications for the concepts she has already studied in previous courses like modern, solid state, atomic, and nuclear physics.
5	General Physics 2- This course focus on the introduction of electrostatic and magnetism - Coulomb's law- Potential electricity- Electrical field- Current and Ohm's law- Direct and alternatives current- Magnetism
6	Electric Circuit PHRE 301: The main objective of this course is to provide the student with the basic knowledge of electrical quantities such as current, voltage, power, energy, and various network theorems for solving various electrical networks and analyzing basic DC and AC circuits

Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

Committee Membership

#	From	To	Position	Organization
	2021	now	Vice of Development and Community Collaboration.	College of Science and Humanities - Jubail
	2021	now	Member of Initiative Committee	College of Science and Humanities - Jubail



1	2018	Now	Head of physics department	Department of Physics, College of Science and Humanities.
	2021	Now	Member of Fluency Committee	Department of Physics, College of Science and Humanities.
2	October2017	Early 2018	Department deputy	Department of Physics, College of Science and Humanities.
3	2018	Now	Member of the Scientific Committee in the Department of Physics.	Department of Physics, College of Science and Humanities.
4	2017	Now	Member of researcher lab committee	Department of Physics, College of Science and Humanities.
5	2015	Now	Supervisor of Physics1 and Physics3 labs.	Department of Physics, College of Science and Humanities.
	2019/2	2019/3	Head of gifted talent	Department of Physics, College of Science and Humanities.

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Operating systems: Windows
2	Data analysis, simulation: SRIM, TRIM, I GORE, PYTHON
3	Text processing: Word, Scientific Word, LATEX, Power Point . . .

Last Update

...31\8\2023