Curriculum Vitae

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Personal Details

Name	Mohammed Ibrahim Al Bahri
Academic Title	Associate Professor in Physics
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Nationality	Omani
Address:	College of Applied and Health Sciences, A'Sharqiyah University P.O. Box 42 Postal Code 400, Ibra, Sultanate of Oman.
Research	Mohammed Al Bahri - Google Scholar https://orcid.org/0000-0001-6051-5143 https://www.scopus.com/authid/detail.uri?authorId=57188624635 https://publons.com/researcher/4373627/mohammed-al-bahri/ https://www.researchgate.net/profile/Mohammed-Al-Bahri-2

Education

- **2018**: **Ph.D. Degree, Physics** (Full-time study), College of Science, Sultan Qaboos University, Oman.

  The title "Magnetic nanowires for high density and low power information storage."

  Supervisor: Prof. Rachid Sbiaa.

  Have a full scholarship from the Ministry of Education to study Ph.D. degree as an excellent staff.

  Supervisor: Prof. Rachid Sbiaa

- **2010: Master's Degree, Physics** (Full-time study), College of Science, Sultan Qaboos University, Oman.
  Title: "Morphology Dependent Assembly of CuO Nanoparticles".

  Supervisor: Prof. Salim Al Harthi

- **1998: B. Education. Physics**, (Full-time study) College of Education, Sultan Qaboos University, Oman.

Work experience:

- **2023- Present: Associate Professor** at A'Sharqiyah University (College of Applied and Health Sciences) in Ibra, North A'Sharqiyah
- **2018- 2023: Assistant Professor** at A'Sharqiyah University (College of Applied and Health Sciences) in Ibra, North A'Sharqiyah.
  - Teaching Physics to undergraduate students in colleges of Applied and health sciences, Engineering and Education.
  - Supervising undergraduate and research work.
  - Evaluating and grading student classwork, laboratory performance, assignments, and papers.
  - Maintaining student attendance records, grades, and other required records.
  - A member of developing three Academic programs committees, internal reviewer for three academic programs and writing proposals to build new programs in CAHS.
  - Contributing in organizing and conducting orientation programs for the CAHS new faculty.
  - Writing proposals for different research grants.
  - Presenting different papers and chairing other sessions at international conferences.

- The chair of some committees in the College of Applied and Health Sciences, such as the learning and teaching committee (2018-2019) and the community service committee (2019-2020)(2020-2021)(2021-2022)(2022-203).
- I have published 13 articles in the web of science and Scopus journals with 126 citations in Google scholar.
- A member of the ASU committees like the industry and community engagement committee, staff and students service committee, and Q.S. ranking committee.
- I have conducted different seminars and workshops for the community public outside ASU, like teachers and school students.
- I have been nominated for the best academic staff award by CAHS for the academic years 2020-2021 and 2021-2022.

- **2012 – 2018: Head of Monitoring Student Achievement Department at Ministry of Education, Oman**.
    - Leading a team of 7 assessment officers and putting the work guide with a clear plan.
    - Writing the assessment documents for grades 1-12.
    - Analyzing the results of the final exam of grades 10,11and 12.
    - Training teachers and supervisors at the Ministry of Education about the student assessment policy.
    - Contributing in physics curriculum development for grades 1-12.
    - Analyzing school's results for grade 12 and Sending the feedback to them.
- **2005 - 2011: Physics assessment officer**, Ministry of Education, Oman.
    - Writing of All National Exams for grades 10,11 and 12.
    - Suggest and Develop Physics National Assessment Policies.
    - Writing and moderating the final Physics exam for Diploma (Grade 12) in Arabic and English.
    - Writing and moderating the final Physics exam for grades 10 and 11 in Arabic and English.
    - Attending some development training inside and outside Oman.
    - Training Physics teachers and supervisors.

- **2002 - 2004: Physics Supervisor**, Ministry of Education, Oman.
    - Supporting teachers and providing them with the needed feedback to enhance and develop their teaching strategies in the classroom.
    - Writing and moderating the final physics exam for grades 5- 12.
    - Attending the seminars and workshops that the Ministry of Education has done.
    - Traning the teachers in order to enhance their ability in teaching.
- **1998 - 2001: Physics Teacher**, Ministry of Education, Oman.
    - Teaching physics for secondary school students in grades 10, 11 and 12.
    - Evaluating and grading student classwork, laboratory performance, assignments, and papers.
    - I was awarded the best physics teacher in 2002 by the Ministry of Education.

Teaching Experience

- **Teaching Physics** for undergraduate students at A'Sharqiyah University, Oman. (2018-present).
- **Teaching Physics** for undergraduate students at Sultan Qaboos University, Oman. (2015-2017).
- **Teaching physics** for secondary school students in grades 10, 11 and 12. (1998-2002). Awarded the best physics teacher in 2002 by the Ministry of Education.

Scholarships

-During my PhD program, I got a scholarship from Gutenberg University in Mainz, Germany, to fabricate and characterize my nanowires related to my Ph.D. project. (From January 2017 to August 2017).

-I earn PhD scholarship from the Ministry of Education to pursue my PhD degree in physics at Sultan Qaboss university(2014-2018).

- I earn MSC scholarship from Ministry of Education to pursue my MSC degree in physics at Sultan Qaboss university(2006-2009).

Language

- Arabic & English Fluent.

Awards

- The best researcher at A'Sharqiyah University for the academic year(2022-2023).
- Awarded Certificate of Excellence among the top-50 academic researchers in Asia for 2022, December 2022.
- 2022: The Best Research award from International Research Awards ISSN International Research Awards 2022 (IIRA-2022).
- 2020: The Best Research award from International Research Awards on New Science Inventions(NESIN) 2020 Awards.
- 2020: The best presenter in ICMMM 2020 : XIV. International Conference on Magnetism and Magnetic Materials, Spain, Barcelona, 17-18 August 2020.
- 2002: Ministry of Education: "The best Physics teachers in Secondary schools."

List of Publications (refereed papers only)

1. *Chirality-Dependent Dynamics and Pinning of Transverse Domain Wall in Constricted Nanowires* ***Mohammed Al Bahri*** *and Rachid Sbiaa, Phys Status Solidi, (March 2024).* *https://doi.org/10.1002/pssa.202300906*
2. *Suitable Catalysts for Electrosynthesis of Ammonia as Green Hydrogen Storage Mohammed M Al Hinaai1*, Rayya Al Balushi,* ***Mohammed Al Bahri*** *and Thuraya Al Harthy*
   Journal of Environmental and Soil Sciences (July 2023).
   https://lupinepublishers.com/environmental-soil-science-journal/pdf/OAJESS.MS.ID.000246.pdf
3. *Noise Measurements in Residential Areas in North A' Sharqiyah Region -Oman,* **Mohammed Al Bahri,** *Al Maha Al Habsi,Khalid Al Hashmi International Journal of Research and Innovation in Applied Science (IJRIAS), (August 2023).*
   DOI: https://doi.org/10.51584/IJRIAS.2023.8715
4. *Multi-segmented nanowires for vortex magnetic domain wall racetrack memory,* **M Al Bahri,** M Al Hinaai, T Al Harthy, *Chinese Physics B,* *https://iopscience.iop.org/article/10.1088/1674-1056/acca0a/meta (2023)*
5. *Vortex Domain Wall Thermal Stability in Magnetic Nanodevices with In-Plane Magnetic Anisotropy,* **Mohammed Al Bahri** and*Thuraya Al-Harthy, physica status solidi (a).* *https://onlinelibrary.wiley.com/doi/abs/10.1002/pssa.202200586(2022)*
6. *Noise Measurements in Industrial Areas in North A' Sharqiyah Region –Oman,* **Mohammed Al Bahri,***Thuraya Al-Harthy,Khalid Al Hashmi and Ibrahim Al Rishidi, International Journal of Research and Innovation in Applied Science (IJRIAS), (July 2022).* *https://www.rsisinternational.org/journals/ijrias/DigitalLibrary/volume-7-issue-6/43-47.pdf*
   DOI : 10.51584/IJRIAS.2022.7603
7. *Chiral Dependence of Vortex Domain Wall Structure in a Stepped Magnetic Nanowire,*

Mohammed Al Bahri, *Phys Status Solidi.* *https://doi.org/10.1002/pssa.202100560*.(2021)

8. *Controlling domain wall thermal stability switching in magnetic nanowires for storage memory nanodevices,* **M.Al Bahri**, *J. Magn. Magn. Mater. 2021;543. https://doi.org/10.1016/j.jmmm.2021.168611.(2021)*

9. *Geometrical Confinement of Vortex Domain Wall in Constricted Magnetic Nanowire With In-Plane Magnetic Anisotropy*, **M.Al Bahri**, *IEEE Trans. Magn*.2021; Volume: 57 Issue: 4. *https://ieeexplore.ieee.org/document/9333660*

10. *Vortex domain wall dynamics in stepped magnetic nanowire with in-plane magnetic anisotropy*, **M.Al Bahri**, *J. Magn. Magn. Mater*. 2020;515. https://doi.org/10.1016/j.jmmm.2020.167293. **(Awarded the best-published research 2020)**

11. *Domain Wall Dynamics in Stepped Magnetic Nanowire with Perpendicular Magnetic Anisotropy, .Phys Status Solidi.* S. Al Risi, R. Sbiaa and **M. Al Bahri**, *2020). https://doi.org/10.1002/pssa.202000225*

12. *Staggered Magnetic Nanowire Devices for Effective Domain-Wall Pinning in Racetrack Memory*, **M. Al Bahri**, B. Borie, T.L. Jin, R. Sbiaa, M. Kläui, and S.N. Piramanayagam, PHYS. REV. APPLIED **11,** 024023 (2019). *https://doi.org/10.1103/PhysRevApplied.11.024023*

13. *Multilayers with robust post-annealing performance for spintronics device application*, Gupta S, Sbiaa R, **M. Al Bahri**, et al.J. Phys. D Appl Phys. 2018;51(46). *https://doi.org/10.1088/1361-6463/aae1ec*

14. *Domain wall oscillation in magnetic nanowire with a geometrically confined region* R. Sbiaa, **M. Al Bahri** and S.N. Piramanayagam, J. Magn. Magn. Mat., vol. 456, 324 (2018). https://doi.org/10.1016/j.jmmm.2018.02.057

15. *Ni thickness influence on magnetic properties (Co/Ni/Co/Pt) multilayers with perpendicular magnetic anisotropy*, R. Sbiaa,. A. Al-Omari, **M. Al Bahri**, P. R. Kharel, M. Ranjbar, J. Åkerman and D. J. Sellmyer, J. Magn. Magn. Mat, vol.441 (2017) https://doi.org/10.1016/j.jmmm.2017.06.054

16. *Ferromagnetic resonance measurements of (Co/Ni/Co/Pt) multilayers with perpendicular magnetic anisotropy* R. Sbiaa, J. M. Shaw, H. T. Nembach, **M. Al Bahri**, M. Ranjbar, J. Åkerman, and S. N. Piramanayagam, Appl. Phys. Lett., vol. 49 (2016). https://doi.org/10.1088/0022-3727/49/42/425002

17. *Geometrically pinned magnetic domain wall for multi-bit per cell storage memory* **M. Al Bahri** and R. Sbiaa, Sc. Rep., vol. 6, 28590 (2016). https://doi.org/10.1038/srep28590

18. *Constricted nanowire with stabilized magnetic domain wall*, R. Sbiaa and **M. Al Bahri**, J. Magn. Magn. Mat., vol. 411, 113 (2016). https://doi.org/10.1016/j.jmmm.2016.03.043

International Conferences and proceedings

- **Mohammed Al Bahri**, a speaker at the 10th International Conference on Materials Research and Nanotechnology Virtual, July 1-2 2024, Kuala Lumpur, Malaysia The paper entitled " Magnetic properties-dependent thermal stability in magnetic nanowires for nanodevice memory".
- **Mohammed Al Bahri**, a speaker at WORLD CONGRESS ON NANOTECHNOLOGY Virtual, November 16-18 2023, Boston, USA The paper entitled " Constricted magnetic nanowires with geometrical confinement of Vortex Domain for storage memory devices **".**
- **Mohammed Al Bahri**, a speaker at the 7th World Congress on Materials Science & Engineering**,** November 6-7, 2023**.** The paper entitled " Thermal Sensitivity Control of Magnetic Nanowire Domain Walls for Storage Memory Nanodevices".
- **Mohammed Al Bahri,** Invited speaker at the 5th Edition of the International Conference on Materials Science and Engineering, September 25-27, 2023, Valencia, Spain**.** The paper entitled " An optimal configuration of Vortex Domain wall pinning in constricted magnetic nanowires
- **Invited speaker at the international conference on Physics and Its Applications,** July 19-22, 2023, San Fansisco, USA**.** The paper entitled " Optimal geometry of the Vortex Domain wall pinning in constricted magnetic nanowires "
- **Keynote speaker** on **5th Edition of Nanotechnology and Nanomaterials Virtual**, December 9-10 2022, The paper entitled " Domain wall Stability switching in magnetic nanowires for nano memory storage devices**".**
- **Invited speaker on 3rd Edition of International Conference on Materials Science and Engineering,** September 21-22, 2022, Chicago, USA **.** The paper entitled " Magnetization thermal stability in magnetic nanowires for nanodevices memory ".
- **A chair of a session and invited speaker at the international conference on Physics and Its Applications,** July 18-21, 2022, San Fansisco, USA**.** The paper entitled " Controlling Thermal Magnetization Switching in Magnetic Nanowires for Storage Memory ".
- **Invited speaker on 5th International Webinar on Nanotechnology and Nanomaterials,** November 08-09, 2021, Greenville, USA **.** The paper entitled " Controlling domain wall thermal stability switching in magnetic nanowires for storage memory nanodevices ".

- **Presented a paper on the 3rd International Webinar on "Material Science & Nanotechnology"),** September 16-17, 2021, Santa Clara, USA **.** The paper entitled " Vortex Domain wall dynamics and pinning in constricted magnetic nanowire for storage memory devices ".
- **Presented a paper on the 4th International Webinar on "The 4th International Conference on Material Strength and Applied Mechanics (MSAM 2021),** August 16-19, 2021**.** " Domain wall thermal stability in magnetic nanowires for storage nanodevices".
- **Presented a paper on the 4th International Webinar on "Nanotechnology & Nanomaterials", Magnetism and Magnetic Materials Conference**, July 05-06, 2021. "Geometrical confinement of Vortex Domain wall in constricted magnetic nanowire for storage memory devices"
- **Presented a paper on Magnetism and Magnetic Materials conference** (MMM-2021) , May 07, 2021, Belgium. "Vortex Domain wall pinning in magnetic stepped nanowire for storage memory devices".
- **Presented a paper on the 3rd international conference on Material Strength and Applied Mechanics(MSAM2020)**, china, 6-9 December 2020. "Stepped nanowire for Domain wall pinning with high storage multi-bit memory."
- **Present a paper in** I**nternational Conference on Magnetism and Magnetic** Materials**,** Spain, Barcelona, 17-18 August 2020.

  "Thermal Effects On Domain Wall Creation And Dynamics In Magnetic Nanowire With In-Plane Magnetic Anisotropy"
- **Present a paper on 4th Industrial Revolution and its impact on education,** Sultanate of Oman-Suhar (21-23 January 2019).
- **Presented a paper in 61th Conference on Magnetism and Magnetic Materials** 2016 (Louisiana, USA)
  "Magnetic domain wall dynamics in constricted nanowire" by M. **Al Bahri**, R. Sbiaa.
- **Participate 7th International Conference on Math and Science Education, Sultan Qaboos University 4-7/11/2012.**

Training and workshops

- Effective Feedback On Assignments, Presentations and Exams, ASU, June 2022.
- Active Teaching Strategies In University Teaching, SQU,June 2022.

- Research Impact and reflections on the Research Excellence Framework in the U.K., University of Kent, UK, June 2022.
- The Strategic Research Program (SRP) by MoHERI: Guidelines and Insights,MoHERI, June 2022.
- Introduction to Qualitative Research and Related Ethical Concerns, ASU, December 2021.
- Randomization Technique to improve your online exam's integrity, ASU, December 2021.
- Bench Marking Practices at SQU, ASU, November 2021.
- Gaps-learning through the flow of work, ASU, November 2021.
- Embedding (21st Century) Skills into the Curriculum, ASU, September 2021.
- The Application of Lean Management in Higher Education, ASU, September 2021.
  Methods of assessment and securing online exams, ASU, March 2021.
- Using Virtual laboratory Software in teaching practical classes, ASU, March 2021.
- Writing a Successful Research Grant Proposal, ASU, February 2021.
- Effective Teaching in Higher Education, ASU, September 2020
- Using MS Teams & Moodle interchangeably and effectively, ASU, June 2020
- How to construct effective exam questions using Bloom Taxonomy, ASU, February 2020.
- Open Educations Resources (OER) & Creative Commons Licenses (CC), /ASU,2019.
- Exam Blueprint and effective construction of MCQ question, ASU, 2019.
- Laboratory HSE awareness Training, SQU, December 2017.
- Physics exam items construction Workshop training for two weeks in Cambridge University, August (2013).
- Professional trainer-training program for two weeks, Ministry of Education, Oman, June(2012).
- Continuous Assessment training for two weeks at Manchester University in July (2011).
- Physics exam items construction Workshop training for two weeks in Cambridge University in August (2013).
- Professional trainer-training program for two weeks, Ministry of Education, Oman, June (2012).
- Continuous Assessment training for two weeks in Manchester University in July (2011).

Online Profiles

Mohammed Al Bahri - Google Scholar

https://orcid.org/0000-0001-6051-5143

https://www.scopus.com/authid/detail.uri?authorId=57188624635

https://publons.com/researcher/4373627/mohammed-al-bahri/

https://www.researchgate.net/profile/Mohammed-Al-Bahri-2

Summary of Key Achievements

- Published 18 publications are indexed as a web of science and Scopus journals.
- Presented around 16 conference papers at international conferences as a speaker and invited speaker (2019-2022).
- The chair of some sessions at international conferences.
- Awarded the best-published research for 2022 from International Research Awards ISSN International Research Awards 2022 (IIRA-2022).
- Awarded the best-published research for 2020 from the Science Father Organization.
- Awarded the best presenter on the International Conference on Magnetism and Magnetic Materials conference (ICMMM 2020)Spain, Barcelona, 17-18 August 2020.
- Nominated by the College of Applied and Health Sciences as the Best Academic staff for the academic years 2020-2021/2021-2022.
- Awarded the best secondary physics teacher in 2002 by the Ministry of Education, Oman.
- Have approved URG by TRC in 2019 cycle.
- Reviewing different Research Grant Proposals (TRC) in the cycle 2020.
- External reviewer with TRC.
- Editor and associate Editor in several well-established journals.
- Organizing and Conducting several research talks, seminars, and workshops.
- Conducting different workshops for teachers and supervisors as community service.
- Organizing several events and workshops as a community service committee chair which serves the ASU community and society.
- Chair and member of different committees at the college level and

University level.

- Conducting several workshops & community contributions in many fields.
- A member of developing new programs committees.
- Proposing new programs like Medical Physis.
- Contributing in interviews to choose the best candidate for a physics lab technician and physics lecturer position.
- Nominated by the CAHS Dean to represent him in Some ASU meetings.