



# Norah Abdullah R Algarou

**POSITION:** Assistant professor

## Personal Data

Nationality | Saudi

Date of Birth | 02/Aug/1986

Department | Physics

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Cited by

	All	Since 2018
<u>Citations</u>	934	931
<u>h-index</u>	15	15
<u>i10-index</u>	15	15

## Language Proficiency

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

## Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
11-October-2022 ١٤٤٤/٣/١٥ هـ	Doctor of Philosophy in Physics (Material Physics)	Imam Abdulrahman Bin Faisal University	Saudi Arabia Imam Abdulrahman Bin Faisal University
19- Nov- 2015	Master of science (Nanoscale Science & Technology)	Leeds University	United kingdom of Great Britain Leeds University Faculty of Engineering Chemical & Process Engineering School
١٤٢٩/٦/٢٨ هـ (2008)	Bachelor in science (Physics)	King Faisal University in Dammam (Currently Imam Abdulrahman Bin Faisal University)	Saudi Arabia Imam Abdulrahman Bin Faisal University Faculty of Science Physics department



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

PhD	Enhanced magnetic and structural properties of functional hard/soft ferrite nanocomposites for microwave application
Master	A silver nanomesh for solar cells

### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work			Date
Assistant professor	Physics department	Faculty of science	Imam Abdulrahman Bin Faisal University	13/4/2023 G 22/9/1444 H
Lecturer	Physics department	Faculty of science	Imam Abdulrahman Bin Faisal University	(2016) G 24/8/1437 H
Demonstrator	Physics department	Faculty of science	Imam Abdulrahman Bin Faisal University	11/10/1430 H

### Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date

### 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	M.A. Almessiere, Y. Slimani, <b>N.A. Algarou</b> , M.G. Vakhitov, D.S. Klygach, A. Baykal, T.I. Zubar, S.V. Trukhanov, A.V. Trukhanov, H. Attia, M. Sertkol, I.A. Auwal	Tuning the Structure, Magnetic, and High Frequency Properties of Sc-Doped $Sr_{0.5}Ba_{0.5}Sc_xFe_{12-x}O_{19}/NiFe_2O_4$ Hard/Soft Nanocomposites.	Adv. Electron. Mater. 8 (2022) 2101124.
2	M.A. Almessiere, <b>N.A. Algarou</b> , Y. Slimani, A. Sadaqat, A. Baykal, A. Manikandan, S.V. Trukhanov, A.V. Trukhanov, I. Ercan	Investigation of exchange coupling and microwave properties of hard/ soft $(SrNi_{0.02}Zr_{0.01}Fe_{11.96}O_{19})/(CoFe_2O_4)_x$ nanocomposites.	Mater. Today Nano. 18 (2022) 100186.
3	Y. Slimani, <b>N.A. Algarou</b> , M.A. Almessiere, A. Sadaqat, M.G. Vakhitov,	Fabrication of exchange coupled hard/soft magnetic nanocomposites: Correlation	Arab. J. Chem. 14 (2021) 102992.



	D.S. Klygach, D.I. Tishkevich, A.V. Trukhanov, S. Güner, A.S. Hakeem, I.A. Auwal, A. Baykal, A. Manikandan, I. Ercan	between composition, magnetic, optical and microwave properties.	
4	M.A. Almessiere, Y. Slimani, <b>N.A. Algarou</b> , M.A. Gondal, Y.S. Wudil, M. Younas, I.A. Auwal, A. Baykal, A. Manikandan, T.I. Zubar, V.G. Kostishin, A.V. Trukhanov, I. Ercan	Electronic, magnetic, and microwave properties of hard/soft nanocomposites based on hexaferrite $\text{SrNi}_{0.02}\text{Zr}_{0.01}\text{Fe}_{11.96}\text{O}_{19}$ with variable spinel phase $\text{MFe}_2\text{O}_4$ (M = Mn, Co, Cu, and Zn).	Ceram. Int. 47 (2021) 35209-35223.
5	M.A. Almessiere, Y. Slimani, A.V. Trukhanov, A. Sadaqat, A. Demir Korkmaz, <b>N.A. Algarou</b> , H. Aydın, A. Baykal, Muhammet S. Toprak	Review on functional bi-component nanocomposites based on hard/soft ferrites: structural, magnetic, electrical and microwave absorption properties.	Nano-Struct. Nano-Objects. 26 (2021) 100728.
6	Mohammad Azam Ansari, Hani Manssor Albetran, Muidh Hamed Alheshibri, Abdelmajid Timoumi, <b>Norah Abdullah Algarou</b> , Sultan Akhtar, Yassine Slimani, Munirah Abdullah Almessiere, Fatimah Saad Alahmari, Abdulhadi Baykal, It-Meng Low	Synthesis of Electrospun $\text{TiO}_2$ Nanofibers and Characterization of Their Antibacterial and Antibiofilm Potential against Gram-Positive and Gram-Negative Bacteria.	New Insights on Biofilm Antimicrobial Strategies (2021) 8, 227.
7	<b>N.A. Algarou</b> , Y. Slimani, M.A. Almessiere, A. Baykal	Exchange-coupling behavior in $\text{SrTb}_{0.01}\text{Tm}_{0.01}\text{Fe}_{11.98}\text{O}_{19}/(\text{CoFe}_2\text{O}_4)_x$ hard/soft nanocomposites.	New J. Chem. 44 (2020) 5800-5808.
8	<b>N.A. Algarou</b> , Y. Slimani, M.A. Almessiere, S. Güner, A. Baykal, I. Ercan, P. Kögerler	Exchange-coupling effect in hard/soft $\text{SrTb}_{0.01}\text{Tm}_{0.01}\text{Fe}_{11.98}\text{O}_{19}/\text{AFe}_2\text{O}_4$ (where A = Co, Ni, Zn, Cu and Mn) composites.	Ceram. Int. 46 (2020) 7089–7098.
9	<b>N.A. Algarou</b> , Y. Slimani, M.A. Almessiere, A. Sadaqat, A.V. Trukhanov, M.A. Gondal, A.S. Hakeem, S.V. Trukhanov, M.G. Vakhitov, D.S. Klygach, A. Manikandan, A. Baykal	Functional $\text{Sr}_{0.5}\text{Ba}_{0.5}\text{Sm}_{0.02}\text{Fe}_{11.98}\text{O}_4/x(\text{Ni}_{0.8}\text{Zn}_{0.2}\text{Fe}_2\text{O}_4)$ Hard–Soft Ferrite Nanocomposites: Structure, Magnetic and Microwave Properties.	Nanomaterials. 10 (2020) 2134.
10	<b>N.A. Algarou</b> , Y. Slimani, M.A. Almessiere, F.S. Alahmari, M.G. Vakhitov, D.S. Klygach, S.V. Trukhanov, A.V. Trukhanov, A. Baykal	Magnetic and Microwave properties of $\text{SrFe}_{12}\text{O}_{19}/\text{M}\text{Ce}_{0.04}\text{Fe}_{1.96}\text{O}_4$ (M = Ni, Co, Cu, Mn, and Zn) hard/soft nanocomposites.	J. Mater. Res. Technol. 9 (2020) 5858-5870.



11	<b>N.A. Algarou</b> , Y. Slimani, M.A. Almessiere, S. Rehman, M. Younas, B. Unal, A. Demir Korkmaz, M.A. Gondal, A.V. Trukhanov, A. Baykal, I. Nahvi	Developing the magnetic, dielectric and anticandidal characteristics of SrFe <sub>12</sub> O <sub>19</sub> /(Mg <sub>0.5</sub> Cd <sub>0.5</sub> Dy <sub>0.03</sub> Fe <sub>1.97</sub> O <sub>4</sub> ) <sub>x</sub> hard/soft nanocomposites.	J. Taiwan Inst. Chem. Eng. 113 (2020) 344-362.
12	<b>N.A. Algarou</b> , Y. Slimani, M.A. Almessiere, A. Baykal, S. Guner, A. Manikandan, I. Ercan	Enhancement on the exchange coupling behavior of SrCo <sub>0.02</sub> Zr <sub>0.02</sub> Fe <sub>11.96</sub> O <sub>19</sub> /MFe <sub>2</sub> O <sub>4</sub> (M = Co, Ni, Cu, Mn and Zn) as hard/soft magnetic nanocomposites.	J. Magn. Magn. Mater. 499 (2020) 166308.
13	A.V. Trukhanov, <b>N.A. Algarou</b> , Y. Slimani, M.A. Almessiere, A. Baykal, D.I. Tishkevich, D.A. Vinnik, M.G. Vakhitov, D.S. Klygach, M.V. Silibin, T.I. Zubar, S.V. Trukhanov	Peculiarities of the microwave properties of hard-soft functional composites SrTb <sub>0.01</sub> Tm <sub>0.01</sub> Fe <sub>11.98</sub> O <sub>19</sub> -AFe <sub>2</sub> O <sub>4</sub> (A = Co, Ni, Zn, Cu and Mn).	RSC Adv. 10 (2020) 32638 – 32651.
14	M.A. Almessiere, Y. Slimani, H. Gungunes, M. Sertkol, M. Nawaz, <b>N.A. Algarou</b> , A. Baykal, I. Ercan	Tb <sup>3+</sup> substituted strontium hexaferrites: Structural, magnetic and optical investigation and cation distribution.	J. Rare Earths. 38 (2020) 402-410.
15	M.A. Almessiere, B. Unal, Y. Slimani, A. Demir Korkmaz, <b>N.A. Algarou</b> , A. Baykal	Electrical and dielectric properties of Nb <sup>3+</sup> ions substituted Ba-hexaferrites.	J. Results Phys.14 (2019) 102468.
16	<i>Munirah A. Almessiere , Yassine Slimani, <b>Norah A. Algarou</b>, Maksim G. Vakhitov, Ayse Demir Korkmaz, Abdulhadi Baykal, Denis S. Klygach, Tatiana I. Zubar, Anwar UI-Hamid, Sergei V. Trukhanov, Alex V. Trukhanov.</i>	Impact of the indium content on structural, magnetic, and electrodynamic properties of nanocomposites based on In-substituted Sr hexaferrite and Ni-Zn spinel ferrite with excellent absorption characteristics	Ceram. Int. 49 (2023) 12885-12894.

### Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date

### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
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### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date

### Current Researches

#	Research Title	Name of Investigator(s)
	Synthesis and Characterisation of Nanostructured Transition Metal Oxide, and their Heterostructure for Photocatalytic Applications (2020-086-CED)	Albetran, Hani., Algarou, Norah., ALHESHIBRI, MUIDH., Low, I.M

### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	The 4th Saudi International Nanotechnology Conference (SINC 2016)	King Fahd Conference Center- Building 60 King Fahd University of Petroleum and Minerals (KFUPM) Dhahran- Kingdom of Saudi Arabia 25th -27th October	Attendance only
2	The Third Forum for Women in Research	AT the University of Sharjah United Arab Emirates, Sharjah 25th August 2022	Oral
3	The International Conference and Exhibition for Science	KSA-Riyadh – King Saud University 6-8/02/2023	Attendance only - virtual

### Membership of Scientific and Professional Societies and Organizations

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### Teaching Activities

#### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Physics I	PHYS 202	Labs + Theoretical
2	General Physics (2)	PHYS 132N	Labs + Lectures (exercises)
3	General Physics (1)	PHYS 101N	Labs + Lectures (exercises)



4	General Physics (3)	PHYS 201N	Labs
5	Practical Physics (1)	PHYS 306N	Labs
6	Solid State Physics (1)	PHYS 401N	Labs
7	Electronics (2)	PHYS 308N	Labs
8	Solid State Physics (2)		Labs
9	Atomic and molecular spectroscopy		Labs
10	Electricity and magnetism (1)		Labs + Lectures (exercises)
11	Electricity and magnetism (2)		Labs
12	Electronics (1)		Lectures (exercises)
13	Properties of the material and heat		Labs
14	Waves		Lectures (exercises)
15	Electronics		Labs
16	Principle of Physics		Labs + Lectures (exercises)
17	Physics I	PHYS 102	Theoretical + Labs
18	Physics II (Mechanics and Waves)	PHYS 206	Theoretical
19	Electricity and magnetism	PHYS 203	Theoretical + Labs

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


#### Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1			
2			

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

1	
2	

#### Course Coordination

#	Course Title and Code	Coordinati on	Co-coordination	Undergr ad.	Postgrad .	From	To
1	Physics I – PHYS 202 (Practical part)	✓		✓		May - 2016	2017
2	Physics II (Mechanics and Waves) - PHYS 206	✓		✓		12/3/2022	22/6/2023
3	Electricity and magnetism - PHYS 203	✓		✓		20/8/2023	4/1/2023



### Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	Subject	College and University or Program	Date

### Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	All undergraduate levels	21	1436 H Oct -2016	1439 H 2018
2	All undergraduate levels	13	1444 H -2022	1445H- 2023

### Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date

### Ongoing Research Supervision

#	Degree Type	Title	Institution	Date

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

#### Administrative Responsibilities

#	From	To	Position	Organization
	8/6/2023 G 19/11/1444 H	Now	Head	Third Standard: Students of the steering committee for self-evaluation and self-study for academic accreditation of the Physics program.

#### Committee Membership

#	From	To	Position	Organization
1			Member	Tables and registration courses
2			Member	Advisory Committee
3			Member	Exams Organization
4			Member	Development Committee



5			Member	Academic Advising Committee
6			Member	Monitoring Committee
7			Member	Quality Committee (NCAAA)
8			Member	Activities Committee
9			Member	Physics Club
10			Member	Libraries Committee
11			Head	Field Training and Graduates Affairs Committee
12			Member	Quality Assurance Committee

### Scientific Consultations

#	From	To	Institute	Full-time or Part-time

### Volunteer Work

#	From	To	Type of Volunteer	Organization
1	24/2/2011 G 21/3/1432 H	1/3/2011 G 26/3/1432 H	Social, cultural (coach - Supervisor) Invention system program (Supervision of some students' inventions & Participation in training some students in the invention program)	The first training center of the Department of Education for Girls in Dammam system
2			Sport, Social. Participation in the walk marathon at the University of Dammam (athlete)	University of Dammam (Imam Abdulrahman Bin Faisal University)
3	1-2-2023 G 10/7/144 H	4-2-2023 G 13/7/1444 H	Project Refereeing - Adjudication of scientific projects for students participating in the IbdAA Science and Engineering Fair in Dhahran (IbdAA 2023) which is a competition based on competition in one of the scientific fields, by presenting individual scientific projects under the required special standards and controls, so that whoever will represent the Kingdom at the International Science and Engineering Exhibition "ISEF" in the United States of America is chosen.	-Science and Engineering Exhibition "National Olympiad for Scientific Creativity (IbdAA 2023)". -Organized by King Abdulaziz and His Companions Foundation for Giftedness and Creativity and Ministry of Education. -Hosted by King Fahd University of Petroleum and Minerals.
4	16/2/2023 G 25/07/144 4 H	16/2/2023 G 25/07/144 4 H	Event Coordination - Second Scientific Poster Day Event	Second Scientific Poster Day organized by the Physics Department - College of Science - Imam Abdulrahman Bin Faisal University.
5	1/3/2023 G 09/08/144 4 H	1/3/2023 G 09/08/144 4 H	Event Coordination -2nd Annual Poster Day for Physics Students (2023)	2nd Annual Poster Day for Physics Students (2023) organized by the Physics Department - College of Science - Imam Abdulrahman Bin Faisal University.





6	17/3/2023 G 25/8/1444 H	31/5/2023 G 11/11/144 4 H	Event Organization- Graduation Day Event	Graduation Day Event organized by the Graduates Affairs Committee -Physics Department - Alumni and Career Development Unit- College of Science - Imam Abdulrahman Bin Faisal University.
7	14/5/2023 28/11/144 5 H	14/5/2023 28/11/144 5 H	Event Organization- Exhibition of course projects for the first semester of 1445 H.	Exhibition of course projects for the first semester of 1445 H organized by the Physics Department - College of Science - Imam Abdulrahman Bin Faisal University.

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

1	ICDL (the International Computer Driving License) (Computer)
2	Using some programs for simulation (OOMMF) (Origin) (Information technology skill)
3	Analyzing data by using programs such as (Origin), (SPSS) (Information technology skill)
4	Influencing Skills, Problem Solving, Fostering Teams, Organizing skills (in Labs) (Technical skills)
5	Rietveld analysis of diffraction data (commercial licensed software Match3! and the FullProf program)

### Last Update

23/12/2023

ORCID ID: <https://orcid.org/0000-0002-1175-0494>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=57209393541>

Google Scholar: <https://scholar.google.com/citations?user=w8v2MzAAAAAJ&hl=ar>

Research Gate: <https://www.researchgate.net/profile/Norah-Algarou>

Web of Science: <https://www.webofscience.com/wos/author/search>

LinkedIn: [linkedin.com/in/norah-algarou-183396264](https://www.linkedin.com/in/norah-algarou-183396264)