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**Work address** Department of General Science, Faculty of  
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<https://orcid.org/0000-0002-8925-9814>

**Academic degree** (Professor)

## Education

- **Postgraduate** Gazi University  
Arts & Sciences Faculty/ department of physics  
(Ankara) Turkey  
PH.D. degree 2005-2009 (Condensed Matter Physics)
- **Postgraduate** Gazi University  
Arts & Sciences Faculty/ department of physics  
(Ankara) Turkey  
M.Sc. degree 2002-2004 (Atomic and Molecular)
- **University** Salahaddin University – College Education / department of physics  
(Erbil) Iraq.  
B.Sc. 1997 -2001
- **High School** Shih Mahmud High School – (Erbil) Iraq  
1993 – 1996

## Personal Information

<b>Sex</b>	Male
<b>Nationality</b>	Iraqi
<b>Birth Place</b>	Iraq – Erbil
<b>Birth Date</b>	Apr. 08-1978
<b>Religion</b>	Islam
<b>Marital Status</b>	Married

## Language Skills

Language	Speaking	Reading	Writing
<b>Kurdish</b>	Very good	Very good	Very good
<b>Arabic</b>	Very good	Very good	Very good
<b>English</b>	Good	Very Good	Very Good
<b>Turkish</b>	Very good	Very good	Very good

## Computer Skills

- Windows: Format, Repairing Windows, Install.
- Networking: Wired, Wireless & VPN Connection.
- Internet: Sharing, Web Page Designing, Searching, Firewall.
- Word: Data Entry Typing English (20 WPM), Turkish (15 WPM), & Page Designing.
- Excel: Numeric Table (mathematical Table).
- Front Page: PHP, HTML, Java Script, Web Page Designing.
- Flash MX & Multimedia Builder: Creating Auto Run & Flash.

## Research Int.

- 1 Electronic, elasticity, and optical properties of III–V compounds and alloys semiconductor.
3. Density Functional theory (DFT), Ab Initio Codes, Condensed matter physics.
4. Atom and Molecules, Vibrational (Raman & Infrared) Spectroscopy.

5. Atoms and molecules by the method of super symmetric WKB energy levels account.
- 6.. Computer Simulation Methods and Atom (CASTEP) Investigation.
7. Free Electron Laser (FEL) and applications.
8. Simulation physics
9. Nanomaterials and nanostructures
10. Properties of thin films

## Work History

FROM MONTH / YEAR	TO MONTH / YEAR	NAME OF EMPLOYER	TITLE OF POST
Mar.2007	Ma.2009	Scientific and Technical Research Council of Turkey (TUBITAK).	Assistant / Scientific Researcher <a href="http://www.tubitak.gov.tr">www.tubitak.gov.tr</a>
Dec.2007	Dec. 2009	Turkish Accelerator Center Project / ANKARA UNIVERSITY	Scientific Researcher (Applications of Free Electron Laser) <a href="http://www.thm.edu.tr">www.thm.edu.tr</a>
Oct.2010	Continuous	Soran University / Faculty of Education, General Sic. Dept.	Lecturer
Dec.2010	Dec. 2012	Soran University / Faculty of Education	In Charge of Teaching Quality Assurance
Oct.2012	Feb.2017	Soran University / Faculty of Education	Head of General Science department <a href="http://www.soran.edu.iq">www.soran.edu.iq</a>
2015	2016	Salaheddin university/ College of Education/ Physics Dept.	Lecturer
Feb.2017	Continuous	Soran University / Faculty of Education/ Mathematical and General science dept.	Lecturer
2015	2020	Scientific promotion in faculty of education	Member
2021	2022	Scientific promotion in faculty of education	Head
2023	Continuous	Central Scientific Promotion Committee in Soran university	Head
2023	Continuous	Al-Kitab University/ Medical Tech College	Lecturer

- 1) [Computational study of lattice dynamics and mechanical properties of  \$\text{Al}\_x\text{In}\_{1-x}\text{PySbzAs}\_{1-yz}/\text{InP}\$  under the effect of composition](#)  
M Alyami, OA Alfrwani, MS Othman, EB Elkenany  
Physica Scripta 99 (6), 065701 (2024)
- 2) [A Comparative Study of Structural and Optical Properties of Al-Doped  \$\text{Fe}\_2\text{O}\_3\$  Films: Experimental and DFT Approach](#)  
KA Mishjil, NH Numan, MS Othman, NF Habubi, NN Jandow, HG Rashid  
Mustansiriyah Journal of Pure and Applied Sciences 1 (3), 28-38 (2023)
- 3) [Impacts of doping cadmium atoms on the mechanical properties of \(n, 0\) zigzag SWCNTs: DFT approach](#)  
MN Rashko, AH Hamad, MS Othman  
Diamond and Related Materials 133, 109681 (2023)
- 4) [Structural and optical properties of GaAs and InAs for doping Sb under the effect of pressure and temperature: DFT and EPM investigations](#)  
MSH Othman, EB Elkenany  
Optical and Quantum Electronics 54 (12), 807 (2022)
- 5) [Effects of Doping Cadmium Atoms on the Electronic and Optical Properties of \(n, 0\) Zigzag SWCNTs: DFT Approach](#)  
MN Rashko, MS Othman, AH Hamad  
ECS Journal of Solid State Science and Technology 11 (8), 081009 (2022)
- 6) [Effect of Mg doping on the optical properties of nanostructures CdO Thin film](#)  
KA Mishjil, MS Othman, AH Abdulsada, HG Rashid, NF Habubi  
Journal of Physics: Conference Series 2322 (1), 012089 (2022)
- 7) [Optical characteristics of cadmium oxide and magnesium doped with nanoclusters](#)  
M Othman  
ECS Journal of Solid State Science and Technology 11 (1), 013012 (2022)
- 8) [Influence of pressure and temperature on mechanical and thermal behaviors of InAsSb and GaAsSb alloys](#)  
EB Elkenany, MSH Othman  
Physica Scripta 96 (12), 125718 (2021)
- 9) [Hydrogen effect on half-metallic and thermoelectric properties of CoRhMnSi \[001\] film](#)  
M Sherzad Othman, M Sadeghi, NA Vahabzadeh, A Boochani, M Amiri  
International Journal of Energy Research 45 (9), 13055-13070 (2021)
- 10) [Mechanical response of PbSSe, PbSTe ternary and PbSnSTe quaternary alloys at high pressure](#)  
MS Othman  
ARO-The Scientific Journal of Koya University 8 (2), 29-33 (2020)
- 11) [Optical response of  \$\text{GaAs}\_{0.75}\text{Sb}\_{0.25}\$  nanosheet for dependent pressure](#)  
MS Othman  
Al-Mustansiriyah J. Sci. 31, 120-125 (2020)

- 12) [Electronic and optical properties of SrS nanosheet in 001 and 101 directions](#)  
M Sedighi, BA Nia, AH Hamad, MS Othman  
Computational Condensed Matter 22, e00445 (2020)
- 13) [Comparison of the structure, electronic, and optical behaviors of tin-doped CdO alloys and thin films](#)  
MS Othman, KA Mishjil, HG Rashid, SS Chiad, NF Habubi, IA Al-Baidhany (2020)
- 14) [Theoretical and experimental investigation of structural and optical properties of lithium doped cadmium oxide thin films](#)  
NN Jandow, MS Othman, NF Habubi, SS Chiad, KA Mishjil, ...  
Materials Research Express 6 (11), 116434 (2019)
- 15) [Impact of pressure and composition on the mechanical behavior of  \$\text{In}\_x\text{Ga}\_{1-x}\text{As}\_1-y\text{Py}\$  and  \$\text{Al}\_x\text{In}\_{1-x}\text{Sb}\_1-y\text{Py}\$  quaternary alloys](#)  
M Othman, S Salih, M Sedighi, E Kasap  
Results in Physics 14, 102400 (2019)
- 16) [Modeling Pressure Dependent Elastic Parameters of GaAsSb Alloy](#)  
M Othman  
ISSN: 2321-6212 (2017)
- 17) [Theoretical analysis of linear optical properties of  \$\text{PbS}\_x\text{Se}\_{1-x}\$  \( \$X=0.5\$ \)](#)  
M S Othman, S M Hamad, H Y Abdullah  
journal of kerbala university 12, 221-228 (2016)
- 18) [First principle structural and electronic properties of  \$\text{Sr}\_3\text{Sb}\_2\$  compound of the cubic Phase](#)  
M Abdullah, M Sedighi, M Othman, B Mahmodi  
Journal of Zankoy Sulaimani-Part A 17 (4), 219-226 (2015)
- 19) [First principle structural and electronic properties of  \$\text{Sr}\_3\text{Sb}\_2\$  compound of the cubic Phase](#)  
BM Muhamad Hamad Abdullah, Matin Sedighi, Mazin Sherzad Othman  
JZS (2015)
- 20) [Molecular Dynamics and Monte Carlo Simulations of Biomolecular Systems](#)  
M Behrouz Mahmoudi, Muna SA Yousif, Mazin SH Othman (2015)
- 21) [Simulation mechanical properties of lead sulfur selenium under pressure](#)  
MS Othman  
Scientific Research Publishing 14 (2013)
- 22) [Structural and Optical Properties of  \$\text{GaAs}\_{0.5}\text{Sb}\_{0.5}\$  and  \$\text{In}\_{0.5}\text{Ga}\_{0.5}\text{As}\_{0.5}\text{Sb}\_{0.5}\$ : ab initio Calculations for Pure and Doped Materials](#)  
MS Othman, KA Mishjil, NF Habubi  
Chinese Physics Letters 29 (2012)
- 23) [Structural and optical properties of  \$\text{GaAs}\_{0.5}\text{Sb}\_{0.5}\$  and  \$\text{In}\_{0.5}\text{Ga}\_{0.5}\text{As}\_{0.5}\text{Sb}\_{0.5}\$ : ab initio calculations for pure and doped materials](#)  
MS Othman, KA Mishjil, NF Habubi  
Chinese Physics Letters 29 (3), 037302 [10](#) (2012)

- 24) [Theoretical investigation of strip cavity length effect on threshold current for MQWL In<sub>0.2</sub>Ga<sub>0.8</sub>As/GaAs](#) Nabel M. Naser Saman Q. Mawlud Dept. of Physics, Science Education ...  
MS Saman Q. Mawlud and Othman  
Journal of collage education 4 (2012)
- 25) [Electronic structure and some optical properties of GaAs<sub>1-x</sub>Sb<sub>x</sub> semiconductors alloys](#)  
SQM Mazin S. Othman, Nabel M. Naser  
Mustansiriya university, Journal of college Education 28 (5), 401-413 (2012)
- 26) [Effect of the Direct Current Modulation on the Relaxation Oscillation and Turn-on Delay for a QWL In<sub>0.2</sub>Ga<sub>0.8</sub>As/GaAs](#)  
NM Naser, SQ Mawlud, MS Othman  
Journal of College of Education, 478-488 1 (2011)
- 27) [Effect of the direct current modulation on the relaxation oscillation and turn-on delay for a QWL InGaAs / GaAs](#)  
MSO Nabel M. Naser, Saman Q. Mawlud  
Mustansiriya university, Journal of college Education 6 (29), 478-489 1 (2011)
- 28) [The structural, electronic and optical properties of In<sub>x</sub>Ga<sub>1-x</sub>P alloys](#)  
M Othman, E Kasap, N Korozlu  
Physica B: Condensed Matter 405 (10), 2357-2361 25 (2010)
- 29) [Ab-initio investigation of structural, electronic and optical properties of In<sub>x</sub>Ga<sub>1-x</sub>As<sub>y</sub>P<sub>1-y</sub> ternary and In<sub>x</sub>Ga<sub>1-x</sub>As<sub>1-y</sub>...](#)  
M Othman, E Kasap, N Korozlu  
Journal of Alloys and Compounds 496 1 (2010)
- 30) [Ab-initio investigation of structural, electronic and optical properties of In<sub>x</sub>Ga<sub>1-x</sub>As<sub>y</sub>P<sub>1-y</sub> ternary and In<sub>x</sub>Ga<sub>1-x</sub>As<sub>1-y</sub>Py quaternary semiconductor alloys](#)  
M Othman, E Kasap, N Korozlu  
Journal of Alloys and Compounds 496 (1-2), 226-233 49 (2010)
- 31) [INVESTIGATION OF THE ELECTRONIC, ELASTIC AND OPTICAL PROPERTIES OF SOME SEMICONDUCTORS BY AB INITIO METHOD](#)  
MSH OTHMAN  
Gazi University, Institute of Science and Technology, Turkey 2009
- 32) [Ab-initio investigation of electronic and optical properties of InAs<sub>1-x</sub>P<sub>x</sub> alloys](#)  
M Othman, E Kasap, N Korozlu  
Gazi University Journal of Science 23 (2), 149-153 8 (2009)
- 33) [Investigation of some metal 4-tert-butylpyridine and phenazine compounds by infrared spectroscopy method](#)  
M OTHMAN  
Gazi University, Institute of Science and Technology, Turkey 2004
- 34) [Analysis Influence of Aluminum Doped on the Optical Parameters of Iron Oxide Films: DFT Investigation](#)  
M Othman  
Available at SSRN 3954764

## Submit papers

- 1) Temperature and pressure effect for electronic and optical properties of GaAs and InAs for doped Sb using a separate method.
- 2) The Interface of FeCrP Film with BN graphene: Electronic, Band Alignment, and Thermoelectric Properties.
- 3) Aluminum doped on the optical parameters of nanostructure Iron oxide films.

## References

1. 4-Workshop on nuclear structure properties 30-31 *October 2007*, Gazi University, Ankara-Turkey
2. National Particle Accelerators and Applications Congress (UPHUK-III) September, *17-19, 2007. Bodrum*
3. Turkish Physical Society 25<sup>th</sup> International Physics Conference. *25 - 29 August, 2008* in Bodrum-Turkey.
4. National Summer School on Particle Accelerators and Detectors (UPHDYO-IV), *Sept., 02-05, 2008* Bodrum.
5. TAC IR FEL (Infrared Free Electron Laser) Test Facility, V. YUUP Congress *05-08 June 2008* Istanbul.
6. National XI. Spectroscopy Congress. *23 – 26 June 2009* Gazi University (Ankara)
7. International Congress, Turkish Physical society *24 – 27 September 2009* Bodrum.
8. Condensed Matter Physics meeting Ankara *06.11.2009* Gazi University Turkey.
9. Revitalizing Research in Kurdistan, International Conference *14 – 16 Dec. 2010*. Erbil / Iraq.
10. 2<sup>nd</sup> International visible Conference (Education Management and Career) *16.17. April, 2011*. Erbil, Iraq.