

C.V

Name: Dr. Bushra Abbas Hasan

Date of Birth: Baghdad, Iraq , 26 July 1965.

Religion: Muslim

Martial statuses: Not Married

No. of children:

Specialization: Solid State Physics/ Thin Films

Position: Teaching in University of Baghdad, College of Science,
Department of Physics

Scientific Degree: Professor

Work Address: University of Baghdad, College of Science, Department of
Physics

Work Phone:

Mobile:

E-mail: bushra abhasan@Yahoo .com.

First, Scientific Certification:

Degree science	University	College	Date
B.Sc.	1987	Science	Baghdad
M.Sc.	1996	Science	Baghdad
Ph.D. Solid State Physics – Thin Films	2003	Science	Baghdad
Any other			

No.	Career	Workplace	From -To
-----	--------	-----------	----------

1	Demonstrator Undergraduate Labs.	Department of Physics College of Science, University of Baghdad	1987-1994
2	Ms. Student Research Work	Department of Physics College of Science, University of Baghdad	1994-1996
3	Assistant Lecturer Teaching & Research	Department of Physics College of Science, University of Baghdad	1996-1999
4	Ph.D. Student Lecturer Research Work	Department of Physics College of Science, University of Baghdad	1999-2003
5	Lecturer, Teaching & Researching	Department of Physics College of Science, University of Baghdad	2003-2004
6	Assistant Professor Teaching & Researching & Examination committee of undergraduate	Department of Physics College of Science, University of Baghdad	2004-2005
6	Assistant Professor Teaching & Researching & Examination committee of undergraduate	Department of Physics College of Science University of Baghdad	2005-2006
7	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching & Examination Committee Of undergraduate Students & Reporter of undergraduate Students	2006-2007
8	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching & Examination Committee of undergraduate Students Reporter of undergraduate Students	2007-2008

9	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (2)Ms.c and (2) Ph.D students	2008-2009
10	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c	2009-2010
11	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c and (1) Ph.D students Examination Committee	2010-2011
12	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c and (1) Ph.D students Examination Committee of undergraduate Students	2011-2012
13	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c and (1) Ph.D students Examination Committee of undergraduate Students	2012-2013
14	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c and (1) Ph.D students	2013-2014
15	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c and (1) Ph.D students	2014-2015

16	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c student	2015-2016
17	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (1)Ms.c and (1) Ph.D students	2016-2017
18	Department of Physics College of Science University of Baghdad	Assistant Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on (2)Ms.c and (2) Ph.D students	2017-2018
19	Department of Physics College of Science University of Baghdad	Professor Teaching & Researching in the Solid State Physics/Thin Films Technology supervising on(1) Ph.D student	2018-2019



University Teaching.

No.	University	The (Institute / College)	From -To
1	1 st Year (Non Physicist) Department of Chemistry, College of Science, University of Baghdad.	General Physics	2003-2004
2	1 st Year (Non Physicist) Department of Chemistry ,College of Science, University	General Physics+ detectors	2004-2005
3	4 st Year Physics College of Science , University of Baghdad	Detectors	2004-2005
4	1 st Year (Non Physicist) Department of Chemistry	General Physics	2005-2006
5	4 st Year Physics College of Science , University	Detectors	2005-2006
6	4 th Year Physics College of Science , University	Detectors	2006-2007
7	3 th Year Physics College of Science , University	Semiconductors	2006-2007
8	3 th Year Physics College of Science , University	Semiconductors	2007-2008

9	3 th Year Physics College of Science , University	Digital Electronics	2008-2009
10	4 th Year Physics College of Science , University	Pollution and Medical Physics	2009-2010
11	2nd Year (Non Physicist) ,Department of Mathematics, College of Science, University of Baghdad.	General Physics+ detectors	2010-2011
12	1st Year (Non Physicist) ,Department of Mathematics, College of Science, University of Baghdad.	General Physics +detectors	2011-2012
13	4 th Year Physics College of Science , University of Baghdad	Semiconductors	2012-2013
14	2 nd Year Physics College of Science , University of Baghdad	Thermodynamics	2013-2014
15	2 nd Year Physics and 4 th year physics ,College of Science , University of Baghdad	Thermodynamics, detectors	2014-2015
16	2 nd Year Physics and 4 th year College of Science , University of Baghdad	Thermodynamics, detectors	2015-2016
17	2 nd Year Physics and 4 th year College of Science , University of Baghdad	Thermodynamics	2016-2017
18	2 nd Year Physics College of Science , University of Baghdad	Thermodynamics	2017-2018



Courses Which You Teach:

No.	Department	Subject	Year
1	Chemistry	general physics	2003-2004
2	Chemistry	general physics	2004-2005
3	Chemistry	general physics	2005-2006

4	Physics	Detectors	2004-2005
5	Physics	Detectors	2005-2006
6	Physics	Detectors	2006-2007
7	Physics	Semiconductors	2006-2007
8	Physics	Semiconductors	2007-2008
9	Physics	Digital Electronics	2008-2009
10	Physics	Pollution and Medical Physics	2009-2010
11	Mathematics	General Physics	2010-2011
12	Mathematics	General Physics	2011-2012
13	Physics	Semiconductors	2012-2013
14	Physics	Thermodynamics	2013-2014
15	Physics	Thermodynamics and detectors	2014-2015
16	Physics	Thermodynamics and detectors	2015-2016
17	Physics	Thermodynamics and detectors	2016-2017
18	Physics	Thermodynamics and detectors	2017-2018
19	Physics	Thermodynamics and detectors	2018-2019

■ Thesis which was supervised by :

Year	Department	Thesis name	ت
2007	Physics	Study the Electronic Transport Mechanisms and Structural Properties of $(\text{Se}_{90}\text{Te}_{10-x}\text{Pb}_x)$ Films, Mohammad Abdulhur Ms.c student	1

2009	Physics	Study the Electronic Transport of $Cd_{1-x}Zn_xTe$ Films by Thermal Evaporation, by Ikhlas Hameem Shilal. Ph.D student	2
2009	Physics	Study of the Structural , Electrical and Optical Properties of ZnS_xSe_{1-x}/Si Hetrojunction, by Majid Ali Dwech Ph.D student	3
2011	Physics	Characterization of (CuInSeTe, CuInSSe and CuInSTe) /CdS Heterojunction Duaa Adel Umran	4
2013	Physics	Fabrication of $(GeS_2)_{100-x}Ga_x/n,p-Si$ & p-Ge Heterojunction Solar Cell Ph.D student Mohammed AbdulhurKadhem	5
2013	Physics	Structural, Optical and Photovoltaic Effect of Thermal Evaporated Tin Selenide Thin Films,Amer Abbas Ramadhan	6
2014	Physics	Effect of Tin Content on the Structural, Optical , Electrical and Photovoltaic Properties of $(Sb_2S_3)_{1-x}Sn_x$ Thin Films, Hiba Husien Issa	7
2014	Physics	Theoretical and Experimental Study For (CdSe) Nanoparticles Hasan Bakheet	8
2015	Physics	Mervat Kadhim Irhaima Ph.D student	9
2016	Physics	Structural, Optical and Transport Properties of Indium Selenide Thin Films for Solar Cell Devices Ayatt Munir Abdulrazzaq	10
2017	Physics	sensing properties of $In_2O_3 :SnO_2$ thin films prepared by PLD Rusul Muhammad Abdullah	11
2018	Physics	Gas sensing properties of ZnO doped with SnO_2 and TiO_2 Thin Films Sahar Mohammad Nief	12
2018	Physics	Synthesis and characterization of $(SnO_2)_{1-x}(CuO:TiO_2)_x$ thin films for gas sensing applications SARA SADIQ MAHMOOD	13

2019	Physics	synthesis and optimization of single and binary system functionalized with CNT Lina Faris Hamza	
------	---------	--	--

Post graduate student which was studied :

Item No.	Course Title	Years	Level	Text or References
	Photoconductivity	2010-2011	MSc.	1-Semiconductors Devices , S.M.Sze,2007. 2-Hand Book of Semiconductors , T.S.Moss , Volume 2. 3-Optical Processes in Semiconductors J.Pankov 4- Photonic Devices ,Edited by Jia-Ming Liu, University of California, Los Angeles Cambridge University Press 2005
	Special Topic +Photoconductivity	2011-2012	MSc	Smart Sensors System , Edited by Gerard C. M. Meijer, 2008+ the same references above The same references mentioned above
	Photoconductivity	2012-2013	MSc	1-Semiconductors Devices , S.M.Sze,2007. 2-Hand Book of Semiconductors , T.S.Moss , Volume 2. 3-Optical Processes in Semiconductors J.Pankov 4- Photonic Devices ,Edited by Jia-Ming Liu, University of California, Los Angeles Cambridge University Press 2005
	Vacuum Technology	2013-2014	MSc	1-Fundamentals of Vacuum Technology, Vacuum Physics and Technology 2- Gas Physics and Vacuum

				Technology, 3-Vacuum Technology Know How
	Nanotechnology	2014-2015	PHD	INTRODUCTION TO NANOMATERIALS AND NANOTECHNOLOGY Vladimir Pokropivny Rynno Lohmus Irina Hussainova Alex Pokropivny Sergey Vlassov
	Sensors	2015-2016	MSc	
	OPTO-ELECTRONIC DEVICES	2016-2017	PHD	1-Semiconductors Devices , S.M.Sze,2007. 2-Hand Book of Semiconductors , T.S.Moss , Volume 2.
	OPTO-ELECTRONIC DEVICES+SPERICAL TOPIC	2016-2017	PHD+ MSc	1-Semiconductors Devices , S.M.Sze,2007. 2-Hand Book of Semiconductors , T.S.Moss , Volume 2.
	OPTO-ELECTRONIC DEVICES	2017-2018	PHD	1-Semiconductors Devices , S.M.Sze,2007. 2-Hand Book of Semiconductors , T.S.Moss , Volume 2.
	Material Characterization	2018-2019	PHD	



Research Projects in The Felid of Specialization to

Year	Publishing	Research name	
------	------------	---------------	--

1996	Iraqi Journal Science, Vol.30, No.1	Optical Properties of GeSe Thin Films	
1996	Iraqi Journal, Vol.40C, No.1	The Electrical Properties Versus Substrate and Annealing Temperature of GeSe Thin Films	
1997	Iraqi Journal, Vol.80, No.7,	The Effect of Substrate and Annealing Temperature on the Optical Properties of GeSe ₂ Thin Films	
1999	Iraqi Journal, Vol.87, No.9	Investigation of the optical constants of CdTe thin films versus substrate and annealing temperature	
2005	Journal of The College of Education, No.5	Effects of Doping with (Methylene Blue and Methyl Red) on Optical Properties of Polymethyl Methacrylate (PMMA)	
2005	Iraqi Journal Science, Vol.46, No.1, P145.	The Effect of Gamma Irradiation on The Optical Constants of (HDPE-PP) Blends,	
2007	Journal of Kerbala University, Vol.5, No.4, P295.	The Effect of Tellurium Content(x) on the Optical and Electrical Properties of (Se _{1-x} Te _x) Thin Films	
2007	Fondonzian Giorgio Ronchi, No.4, P465.	Comparison Study on the Effect of Substrate Temperature on the Optical Properties of (PbSe) and (PbTe) Thin Films	
2008	Fondonzian Giorgio Ronchi, No.4, P.487-495.	The Effect of LiF on the Optical Properties of (PVC-LiF) Composites	
2008	Journal of Kerbala University, Vol.6, No.1, P1.	Cole- Cole Diagram of gold doped germanium films	
2008	Iraqi Journal of Physics, Vol.1, No.4	Influence of gold concentration on the main detection parameters of Ge-Au Photoconductive detector	
2008	Iraqi Journal of Physics, Vol.5, No.7 P.129-141	The Effect of Annealing temperature on Optical Properties of (ZnSe) Films	
2009	Fondonzian Giorgio Ronchi, No.2, P275.	The Effect of Beta Irradiation on the Optical Properties of (PS-PC) Blends	
2009	Iraqi Journal of Physics, Vol.7, No.8, PP.104-112.	Electrical Properties of ZnS Thin Films	
2010	Journal of The College of Education	The Effect of Irradiation with Gamma Rays on The Optical and The Electrical Properties of ZnS Thin Films.	
2010	PUBLISHED Journal of Kerbala University	A.C Conductivity of (PS-PC) films Blends.	
2010	PUBLISHED Journal of Kerbala University	The Effect of Germanium Content(x) on The Electrical Properties of Ge _x S _{1-x} Thin Films	
2011	PUBLISHED Journal of Kerbala University	Dielectric permittivity and A.C conductivity of Ge _x S _{1-x} Thin Films.	
2011	ATTI DELLA "FONDAZIONE GIORGIO RONCHI" ANNO LXVI, 2011 - N. 4	Comparison between the effect of Beta and Gamma irradiation on the optical constants of PMMA films	
2007	British Journal of Science 14 October 2012, Vol. 7 (1)	Optical Properties of Poly Vinyl Chloride PVC Films Irradiated with Beta and Gamma -Rays	

2012	Estratto da: Atti della Fondazione Giorgio Ronchi Anno LXVII, n. 3 - Maggio-Giugno 2012	Thickness dependent structural and optical properties of thermally evaporated PbF ₂ thin films	
2011	Journal of The College of SCIENCE / ALMUSTAANSYRIA	The Optical Properties of CuInS ₂ Thin FILMs	
2012	PUBLISHED Iraqi Journal of Physics University of Baghdad, VOL.10,NO.18,P35-49	The Effect of sulfide Content(x) on the Electrical Properties of (ZnS _x Se _{1-x}) Thin Films	
2012	IOP PUBLISHING SEMICONDUCTOR SCIENCE AND TECHNOLOGY Semicond. Sci. Technol. 27	Dielectric permittivity and ac conductivity of CuInSeTe thin films	
2013	PUBLISHED Iraqi Journal of Physics University of Baghdad,vol.11,no.20,p.47-57 2013	Dielectric Behavior and AC Electrical Conductivity Analysis of PMMA Film	
2013	INDIAN JOURNAL OF APPLIED RESEARCH Volume : 3 Issue : 3 March 2013 ISSN - 2249-555X	Effect the Thickness on Structural and Optical Parameters of PbSe Thin Films	
2014	J. Nano. Adv. Mat. 2, No. 2, 43-49 (2014)	Structural and Optical Properties of SnS Thin Films	
2014	International Journal of Advanced Research in Engineering and Technology (IJARET), Volume 5, Issue 1, January (2014) © IAEME	PHOTOVOLTAIC STRUCTURES USING THERMALLY EVAPORATED TIN SULFIDE THIN FILMS	
2013	International Journal of Nanotechnology & Advanced Materials J. Nano. Adv. Mat. 1, No. 2, 87-98 (2013)	Dielectric Properties of Vacuum Evaporated SnS Thin Films	
2014	International Journal of Advanced Scientific and Technical Research Issue 4 volume 2, March-April 2014	Characteristics of (Sb ₂ S ₃) _{1-x} Sn _x Thin Film for Solar Cell Applications	
2014	Int. J. Thin Fil. Sci. Tec. 3, No. 2, 71-76 (2014)	AC Conduction and Dielectric Characterization of Vacuum Evaporated PbSe thin Films	
2012	ATTI DELLA "FONDAZIONE GIORGIO RONCHI" ANNO LXVII, 2012 - N. 3	Thickness dependent structural and optical properties of thermally evaporated PbF ₂ thin films	
2013	International Journal of Application or Innovation in Engineering & Management (IJAIEM) Volume 2, Issue 11,	AC ELECTRICAL CONDUCTIVITY ANALYSIS OF (PVC-PS) BLEND FILMS	
2013	International Journal of Application or Innovation in Engineering & Management (IJAIEM) Volume 2, Issue 9, September 2013	Study the electronic properties of core - oxidization CdSe nanocrystals	
2013	INDIAN JOURNAL OF APPLIED RESEARCH Volume : 3 Issue : 10 Oct 2013 ISSN - 2249-555X	Structural and Electrical Properties of Thermally Evaporated Sn _x Se _{1-x} Thin Films	
2013	Int. J. Thin Film Sci. Tec. 2 No. 1, 29-36 (2013)	AC Conductivity and dielectric analysis of CuInSSe Thin Films	
2014	International journal of advanced scientific and technical research Issue 4 volume 3, May-June 2014	Effect of Thickness on the Performance of Bi ₂ S ₃ Thin Film for Photovoltaic Devices	

2014	International journal of advanced scientific and technical research Issue 4 volume 3, May-June 2014	Fabrication $(Sb_2S_3)_{1-x}Sn_x$ /n, p-Si Solar cell	
2018	IOP Conf. Series: Journal of Physics: Conf. Series 1032 (2018) 012020 doi :10.1088/1742-6596/1032/1/012020	Characterization of CuInSTe/CdS Heterojunctions	
2018	IRAQI JOURNAL OF PHYSICS 2018 VOL-16 , NO.37. PP32-45	D.C conductivity of In_2O_3 - SnO_2 thin films and manufacturing of gas sensor	
2015	International Journal of Current Engineering and Technology E-ISSN 2277 – 4106, P-ISSN 2347 – 5161 ©2015 INPRESSCO®, Accepted 22 March 2015, Available online 29 March 2015, Vol.5, No.2 (April 2015)	<i>Structural Morphology and Electrical Properties of Vacuum Evaporated SnS Thin Films</i>	
2016	Australian Journal of Basic and & Appl. Sci., 10(10): 69-73, 2016	Effect of annealing on P3HT:IC70BA organic solar cell devices	
2015	International Journal of Current Engineering and Technology Accepted (2015)	<i>Nano Technology Enhanced Performance of α- $(GeS_2)_{100-x}Ga_x$ /Ge,n,p-Si Hereterojunction</i>	
2014	Journal of Chemical, Biological and Physical Sciences 747. -740; Jan. 2015, Vol. 5, No. 1 – ; Nov . 2014 CJCbps; Section	The Optical Properties of (PVC-PS) Blends	
2015	Iraqi Journal of Physics University of Baghdad	<i>Electrical, and Morphological Study of Thermally Evaporated $(Sb_2S_3)_{1-x}Sn_x$ Thin Films</i>	
2013	Iraqi Journal of Physics University of Baghdad, vol.11, no.21, p.28-36 ,2013	<i>Determination The Optical Properties of α- $(GeS_2)_{100-x}Ga_x$ Thin Films</i>	
2014	International Journal of Thermal Technologies E-ISSN 2277 – 4114 ©2014 INPRESSCO®, All Rights Reserved	Zinc-Blend Cadmium Selenium Colloidal Nanoparticales preparation by Chemical Reaction	
2015	Australian Journal of Basic and & Appl. Sci. 9(36) December 2015, Pages: 562-572,	Optical Properties of (PMMA-PVA)Blends doped with Sn, Ag and Fe	
2015	<i>IOSR Journal of Applied Physics (IOSR-JAP) e-ISSN: 2278-4861. Volume 7, Issue 6 Ver. I (Nov. - Dec. 2015), PP 01-04</i>	Electrical Properties of Thermally Evaporated In ₄₀ Se ₆₀ Thin Films	
2018	Advances in High Energy Physics Hindawi Template version: May18	Role of Doping Ratio on The Sensing Properties of ZnO:SnO ₂ Thin Films	

2017	Iraqi journal of physics , 15, 34 , 1-14	X-RAY DIFFRACTION AND DIELECTRIC PROPERTIES OF PBSE THION FILMS	
2017	Iraqi journal of physics , 4, 5 , 713-732	Effect of thickness on the structural , morphology and A.C conductivity of Bi ₂ S ₃ thin films	
2014	<u>ANNO LXXI, 2016 - N. 6</u> <u>ATTI DELLA "FONDAZIONE GIORGIO RONCHI"</u>	11.4% efficiency of organic solar cells using Graphene electron collecting buffer layer as a novel work	
2015	International Journal of Current Engineering and Technology March 2015, Vol.5, No.2 (April 2015)	Structural Morphology and Electrical Properties of Vacuum Evaporated SnS Thin Films	
2012	British Journal of Science 14 October 2012, Vol. 7 (1)	Optical Properties of Poly Vinyl Chloride PVC Films Irradiated with Beta and Gamma –Rays	
2010	Journal of K erbala University , Vol. 8 No.4 Scientific . 2010	A.C Conductivity of (PS-PC) Blends Films	
2013	Volume : 3 Issue : 3 March 2013 ISSN - 2249-555X NDIAN JOURNAL OF APPLIED RESEARCH X	Effect the Thickness on Structural and Optical Parameters of PbSe Thin Films	
2016	Australian Journal of Basic and Applied Sciences, 10(8) April 2016, Pages: 143-150	Sensing Properties of (In₂O₃:Eu) Thin Films	
2011	Journal of Kerbala University , Vol. 9 No.2 Scientific .	Dielectric permittivity and AC conductivity of GexS_{1-x} Thin Film	

■ كتب الشكر ، الجوائز و شهادات التقدير.

السنة	الجهة المانحة	كتاب الشكر أو الجائزة أو شهادة التقدير	ت
1989	رئاسة قسم الفيزياء	كتاب شكر وتقدير	1
1997	رئاسة قسم الفيزياء	كتاب شكر وتقدير	2
2006	عمادة كلية العلوم	كتاب شكر وتقدير	3
2010	عمادة كلية العلوم	كتاب شكر وتقدير	4
2011	رئيس جامعة بغداد	كتاب شكر وتقدير	5
2012	رئيس جامعة بغداد	كتاب شكر وتقدير	6
2013	رئيس جامعة بغداد	كتاب شكر وتقدير	7
2014	رئيس جامعة بغداد	كتاب شكر وتقدير	8
2014	رئيس جامعة بغداد	كتاب شكر وتقدير	9
2014	وزير التعليم العالي والبحث العلمي	كتاب شكر وتقدير	10
2018	رئيس جامعة بغداد	كتاب شكر وتقدير	11
2018	رئيس جامعة بغداد	كتاب شكر وتقدير	12
2018	رئيس جامعة بغداد	كتاب شكر وتقدير	13
2019	مساعد رئيس جامعة بغداد	كتاب شكر وتقدير	14
2019	مساعد رئيس جامعة بغداد	كتاب شكر وتقدير	15



■ Membership:

- Member in examination committee for the years 1996-1997,2003-2004,2004-2005,2005-2006, 2010-2011,2011-2012,2012-2013 , 2016-2017
- Reporter of undergraduate Students 2005-2006.

- **Member in observation committee of undergraduate Students 2010-2011,2011-2012,2012-2013 ,2013-2014,2014-2015,2015-2016, 2016-2017, 2017-2018, 2018-2019**



■, **languages:**

- ✓ Arabic
- ✓ English

