أ. م. د. إلهــام جاسـم محمــد

الجامعة المستنصرية _ كلية العلوم

Email: elham.jasim@uomustansiriyah.edu.iq

ملخص تعريفي

الدكتورة الهام جاسم محمد تدريسية في قسم علوم الفيزياء/ كلية العلوم/ الجامعة المستنصرية حصلت على شهادة الدكتوراه باختصاص Optoelectronics قسم علوم الفيزياء/ كلية العلوم/ الجامعة المستنصرية، وشهادة الماجستير باختصاص Image Processing قسم علوم الفيزياء/ كلية العلوم/ الجامعة المستنصرية، أكملت دراسة البكلوريوس في قسم علوم الفيزياء/ كلية العلوم/ الجامعة المستنصرية وكانت من ضمن العشرة الأوائل على القسم وتم تعيينها معيدة في نفس القسم.

الشهادات الدراسية

- Ph.D. #1: دكتوراه Optoelectronics
- M.Sc. #2: ماجستير Image Processing
- B.Sc. #3: بكلوريوس Physics Science

الجوائز والتكريم الأكاديمي

1- المساهمة في المؤتمرات المحلية خلال 2011-2019 والحصول على شهادات تقديرية محلية.
2- المساهمة في المؤتمرات الاجنبية خلال 2011-2019 والحصول على شهادات تقديرية دولية.
3- الحصول على تكريم يوم العلم 2011.
4- الحصول على أكثر من 25 كتب شكر (رئيس الوزراء-معالي الوزير-رئيس الجامعة المستنصرية-عميد كلية العلوم - رئيس قسم الفيزياء-القوة الجوية التركية).
5- الحصول على أكثر من 20 شهادة تقديرية محلية.
6- الحصول على 5 شهادة تقديرية أجنبية.
7- الحصول على شهادة مركز التعليم المستمر/ إعداد أدلة ضمان الجودة 2014/2013 الجامعة التكنولوجيا.
8- الحصول على شهادة الـIC3 وبدرجة دولية.
9- الحصول على شهادة التوفل.
10- الحصول على شهادة LATEX.
11- شهادة مشاركة في دورة تطبيق معالج النصوص الوورد 2010 التي أقامتها شعبة ضمان الجودة وتقويم الأداء.
12- شهادة مشاركة في دورة الأجهزة المختبرية (تشغيلها وصيانتها) التي أقامتها شعبة ضمان الجودة وتقويم الأداء للمتخرجين 2016
13- شهادات تقديرية أخرى لا يسع الحيز ذكرها.

الخبرة الأكاديمية والتدريس

1 معيدة في مختبر النووية/ قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية
2 معيدة في مختبر الالكترونكس/ قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية
3 مدرس مساعد في مختبر الحاسبات/ قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية
والمواد التي تم تدريسها:
- NUMERICAL ANALYSIS
- حاسبات BASIC
- حاسبات VISUAL BASIC
- حاسبات MATLAB
4 مدرس في قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية وتم تدريس مادة OPTICS للمرحلة الثالثة.

5 مدرس في قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية وتم تدريس مادة MATLAB للمرحلة الثالثة.

6 أستاذ مساعد في قسم الفيزياء/كلية العلوم/الجامعة المستنصرية وتم تدريس مادة MATLAB للمرحلة الثالثة.

المقررات الدراسية التي تم تدريسها

الدراسات الأولية	الدراسات العليا
NUMERICAL ANALYSIS BASIC VISUAL BASIC MATLAB OPTICS	

الانتساب المهني أو الجمعيات

1- عضو في جمعية النانوتكنولوجي 2012/2013.
2- رئيس لجنة ضمان الجودة/كلية العلوم/الجامعة المستنصرية 2013/2014.
3- رئيس لجنة اعداد دليل قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية 2013/2014.
4- عضو اللجنة الاجتماعية قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية 2013/2014.
5- عضو لجنة تطوير المناهج قسم علوم الفيزياء/كلية العلوم/الجامعة المستنصرية 2013/2014.
6- عضو لجنة اعداد تقرير التقييم الذاتي كلية العلوم/الجامعة المستنصرية 2014/2015.
7- رئيس لجنة اعداد دليل كلية العلوم/الجامعة المستنصرية 2014/2015.
8- عضو لجنة غيابات الطلاب 2016/2017.
9- عضو لجنة النشاطات البحثية والنتاجات 2016/2017.
10- رئيس لجنة سمنار طلاب الدراسات العليا 2016/2017.
11- عضو لجنة مناقشة اطروحة دكتوراه 2017.
12- عضو لجنة مناقشة رسالة ماجستير 2018.
13- عضو لجنة التعليم المستمر 2018/2019.
14- عضو لجنة وزارية لوضع أسئلة المتقدمين للتعيين 2018/2019.
15- عضو لجنة إعداد الدليل الشامل لكلية العلوم 2019.

المنشورات العلمية

(البحوث ذات معاملات عالمية IF)

البلد	عنوان المجلة	IF	عنوان البحث	ت
Indian	International journal of electrical engineering and technology (IJEET)	5.5028	Fabry –Perot Interferometer Picoseconds Dispersive Properties	1
Indian	International journal of advanced research in engineering and technology (IJARET)	5.8376	Analyzing Numerically Study the Effect of Add a Spacer Layer in Gires-Tournois Interferometer Design	2
Japan	Asian Journal of Natural and Applied Sciences	1.042	Theoretical Design TE-Polarization One-dimensional photonic crystal	3
USA	International journal of scientific and engineering research	1.4	IIR Butterworth Low-High Pass Optical Filters Design	4
Indian	International journal of industrial engineering research and development	5.1283	Soliton Optical Fibers Supercontinuum	5

			Generation Near the Zero Dispersion	
Indian	International journal of industrial engineering & technology (IJIET)	4.3857	Numerical Design TEM-Polarization One-Dimensional Photonic (1DMDP) Crystal	6
Indian	International journal of application or innovation in engineering and management (IJAIEM)	2.379	Design Study Sobel Edge Detection	7
Japan	International journal of engineering trends and technology(IJETT)	4.33	Design Optimize Interference Dielectric Edge Filter	8
Indian	International Journal of Innovative Research in Science, Engineering and Technology	5.422	Study Sobel Edge Detection Effect on the Image Edges Using MATLAB	9
Indian	International Journal of Physics and Research	2.3529	TEM-Polarization 2D-Photonic Crystal Design Using Fourier Expansion In Complex Quantum Hilbert Space	10

PUBLICATIONS AND PAPERS (المنشورات والبحوث)

Publications
Conference Papers

1- Elham Jasim Mohammad, "The Inhibitory Effect of Silver Nanoparticles on Some especially Bacteria Microorganisms, Pesudomonas Aeruginosa, Esherichia Coli and Staphylococcus Aureus", 2nd International Conference on Materials Engineering & Science (IConMEAS), (2019).

2- Elham Jasim Mohammad, "Image Processing of SEM Image Nano Silver Using Kmeans MATLAB Technique", The 1st International Conference on Safety and Security of the Scientific Applications (ICSSSA), (2018).

3- Elham Jasim Mohammad, "Fabrication of NiO_{NPs}/PSi for Gas Sensor Application Prepared by Chemical Method", Meeting on Nanotechnology: Principles and Application: Malaysia, (2018).

4- Elham Jasim Mohammad, "Study the Acousto-Optic Spatial Filters Diffracted Light at Zeroth-Order Using MATLAB", IOP Conference Series: Materials Science and Engineering: Turkey, (2018).

5- Elham Jasim Mohammad, "Theoretical Study Acousto-Optic Spatial Filters at Zeroth-Order Diffracted Light Using MATLAB", Conf. 21th College of Education Al-Mustansiriyah, (2015).

6- Elham Jasim Mohammad and Gaillan H. Abdullah, "Analytic Design of Dielectric Multilayer Thin Films Chirped Mirrors", Conf. 6th International on Resent Advance and Space Technologies RAST2011, IEEE, Turkey, (2013).

7- Elham Jasim Mohammad and Gaillan H. Abdullah, "Theoretical Design of Double Chirped Mirrors for Dispersion Compensation of Femtosecond Laser Pulses", Conf. 20th College of Education Al-Mustansiriyah, (2013).

8- Elham Jasim Mohammad, "Design and Study of Dielectric Double Chirped Mirrors in Ultra Short Femtosecond Pulse Lasers", Conf. 5th International on Resent Advance and Space Technologies RAST2011, IEEE, Page 608-611, Turkey, (2011).

9- Elham Jasim Mohammad, "Design Study on Dielectric Bragg Mirror", Conf. 18th College of Education Al-Mustansiriyah, (2011).

10- Elham Jasim Mohammad, "Design of Dielectric Bragg Mirror Consisting Quarter-Wave Stacks Using Transfer-Matrix Method", Conf. 7th College of Science Al-Mustansiriyah, (2011).

Journal Papers

الجهة	تاريخ النشر	المجلة التي نشر فيها البحث	عنوان البحث	ت
Turkey	2018	Materials Science and Engineering	Study the Acousto-Optic Spatial Filters Diffracted Light at Zeroth-Order Using MATLAB	1
Iraq	2018	Al-Mustansiriyah Journal of Science	Image Processing of SEM Image Nano Silver Using Kmeans MATLAB Technique	2
Malaysia	2018	Meeting on Nanotechnology: Principles and Application	Fabrication of NiO_{NPs}/PSi for Gas Sensor Application Prepared by Chemical Method	3
Iraq	2017	مجلة إشراقات تنموية مجلة علمية محكمة تصدر مركز التنمية للدراسات والتدريب/ قيد النشر	Deformation and Electronic Extortion Serious Indicator of Changing the Moral, Phenomenon Support by Technology and Moral Retreat	4
France	2017	International Journal of Science and Engineering Investigations	Silicon Photon Absorber (Photon Cross Section)	5
France	2017	International Journal of Science and Engineering Investigations	Silicon Photon Cross Section Using Logarithmic Scale	6
Iraq	2016	Al-Bahir Journal of Natural and Engineering Sciences	Effects of Thin Film Multilayers Thickness and Refractive Index on Narrowband Filters Transmission's	7
Iraq	2016	Al-Mustansiriyah Journal of Science	Design Study Dielectric (TiO_2/SiO_2) Heat Reflecting Cold Mirrors	8
Indian	2015	International Journal of Physics and Research	TEM-Polarization 2D-Photonic Crystal Design Using Fourier Expansion In Complex Quantum Hilbert Space	9
Iraq	2015	Journal of College of Education	Theoretical Design for Dielectric Chirped Mirrors	10
Iraq	2015	Conf. 21 College of Education Al-Mustansiriyah	Theoretical Study Acousto-Optic Spatial Filters at Zeroth-Order Diffracted Light Using MATLAB	11
Indian	2014	International Journal of Innovative Research in Science, Engineering and Technology	Study Sobel Edge Detection Effect on the Image Edges Using MATLAB	12
Indian	2014	International journal of application	Design Study Sobel Edge Detection	13

		or innovation in engineering and management (IJAIEM)		
Japan	2014	International journal of engineering trends and technology(IJETT)	Design Optimize Interference Dielectric Edge Filter	14
Japan	2013	Asian Journal of Natural and Applied Sciences	Theoretical Design TE-Polarization One-dimensional photonic crystal	15
USA	2013	International journal of scientific and engineering research	IIR Butterworth Low-High Pass Optical Filters Design	16
Indian	2013	International journal of electrical engineering and technology (IJEET)	Fabry–Perot Interferometer Picoseconds Dispersive Properties	17
India	2013	International journal of advanced research in engineering and technology (IJARET)	Analyzing Numerically Study the Effect of Add a Spacer Layer in Gires-Tournois Interferometer Design	18
India	2013	International journal of industrial engineering research and development (IJIERD)	Soliton Optical Fibers Supercontinuum Generation Near the Zero Dispersion	19
Indian	2013	International journal of industrial engineering & technology (IJIET)	Numerical Design TEM-Polarization One-Dimensional Photonic (1DMDP) Crystal	20
Malaysia	2013	International Journal of Advances in Applied Sciences	TM-Polarization One-Dimensional Photonic Crystal Design	21
Indian	2013	International Journal of Physics and Applications (IJPA)	Design and Analysis Superprism Effects In 1D Photonics Crystal	22
Indian	2013	International Journal of Photonic (IJP)	Design and Analysis Narrowband Filters	23
Indian	2013	International Journal of Physics and Applications (IJPA)	Theoretical Design of Picoseconds Fabry–Pérot Filter and Study the Dispersion Using Coupled Mode Equation	24
Turkey	2013	Conf. 6th International on Resent Advance & Space Technologies RAST2013	Analytic Design of Dielectric Multilayer Thin Films Chirped Mirrors	25
Iraq	2013	Conf. 20th College of Education Al-Mustansiriyah	Theoretical Design of Double Chirped Mirrors for Dispersion Compensation of Femtosecond Laser Pulses	26
Indian	2012	International Journal of Physics and	Multilayer Thin Films Dielectric Double	27

		Applications	Chirped Mirrors Design	
Indian	2012	International Journal of Physics and Applications (IJPA)	Double Chirped Mirrors and Chirped Law Synthesis	28
Indian	2012	International Journal of Physics and Applications	Statistical Simulation Methods	29
Iraq	2012	Al-Mustansiriyah Journal of Science	Study the Design of Dielectric Chirped Mirror	30
Iraq	2012	Al-Mustansiriyah Journal of Science	Image Shearing Operating Algorithm in Still Image Processing	31
Iraq	2012	Al-Mustansiriyah Journal of Science	Effect of Geometric Rotation Operating on Still Image Quality	32
Indian	2011	International Journal of Physics and Applications (IJPA)	Theoretical Design for Double Chirped Mirrors in Femtosecond Pulse Lasers	33
Turkey	2011	Conf. 5th International on Resent Advance and Space Technologies RAST2011	Design and Study of Dielectric Double Chirped Mirrors in Ultra Short Femtosecond Pulse Lasers	34
Iraq	2011	Conf. 18th College of Education Al-Mustansiriyah	Design Study on Dielectric Bragg Mirror	35
Iraq	2011	Conf. 7th College of Science Al-Mustansiriyah	Design of Dielectric Bragg Mirror Consisting Quarter-Wave Stacks Using Transfer-Matrix Method	36
Iraq	2009	Journal of College of Education	Speckle Noise Reduction in SAR Images Using Non-Adaptive Mode-Filter	37
Iraq	2009	Journal of College of Education	Advanced Edge Detection: Canny Edge Detection Filter	38
Iraq	2009	Journal of College of Education	Embedding Data in JPEG Images	39
Iraq	2009	Journal of College of Education	Applied Algorithm of Image Geometric Shearing Operating on Still Images	40
Iraq	2009	Journal of College of Education	Algorithm of Image Rotation Operating That Using in Still Image	41
Iraq	2009	Journal of College of Education	General Properties and Statistics Distribution for Speckly Images	42
Iraq	2009	Journal of College of Education	Recognition of SAR Images Using Pattern	43

			Classification Method	
Iraq	2008	Al-Mustansiriyah Journal of Science	Statistical Concepts for Speckle Noise	44
Iraq	2008	Journal of College of Education	Statistical Concepts for Speckle Noise	45
Iraq	2008	Iraqi Company for Data Technology	Adaptive Noise Filtering For Magnitude MR Data And Some Statistical About MR Imaging	46
Iraq	2008	Al-Basra University Jornal	Segmentation of SAR Images Using Thresholding Techniques	47
Iraq	2008	Iraqi Company for Data Technology	Messages Hiding Technique in Digital Images	48
Iraq	2008	Iraqi Company for Data Technology	Adaptive Edge Detection Method Using Circular Sliding Mask	49
Iraq	2008	Journal of College of Education	Study Coherent Noise Simulation Methods	50
Iraq	2008	Journal of College of Education	Adaptive SAR Image Smoothing Using Gamma-Filter	51
Iraq	2008	Al-Mustansiriyah Journal of Science	Adaptive Contrast-Enhancement Magnetic Resonance Images	52
Iraq	2008	Al-Mustansiriyah Journal of Science	Segmentation of SAR Images Using Edge-Detector Method	53
Iraq	2002	Al-Mustansiriyah Journal of Science	Speckle Noise Reduction Using Non-Adaptive Filters	54

الإشراف على مشاريع التخرج

1- Dr. Elham J. Mohammad, Yasser Abd Al-Kalak Mohammed Wdaa, "Design Study Sobel Edge Detection Processing Using MATLAB " A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, Unitive Number: 2010 508 2 183, 2013/2014.

2- Dr. Elham J. Mohammad, Abbas Hiway Rhai Al-Shimary, "Design Study Acousto-Optic Spatial Filtering At Zeroth-Order Diffracted Light Using MATLAB", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2013/2014.

3- د. الهام جاسم محمد, يوسف سعد عباس, "المفاعلات النووية", مشروع تخرج مقدم الى كلية العلوم الجامعة المستنصرية كجزء من متطلبات نيل درجة البكلوريوس في علوم الفيزياء, 2015/2014.
4- د. الهام جاسم محمد, مهدي خنجر بدن, "تفاعل الجسيمات المشحونة مع المادة", مشروع تخرج مقدم الى كلية العلوم الجامعة المستنصرية كجزء من متطلبات نيل درجة البكلوريوس في علوم الفيزياء, 2015/2014.

5- Dr. Elham J. Mohammad, Wasan Satar Jbar, "Simulation Physics with MATLAB to Design Electric Motor", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, Unitive Number: 2012 508 2 074, 2015/2016.

6- Dr. Elham J. Mohammad, Wurood Basim Mohammed, "Simulation Physics with MATLAB to Design Electric Motor", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, Unitive Number: 2012 508 2 003, 2015/2016.

7- Dr. Elham J. Mohammad, Ruba Saad Hazem, "Silicon Photon Absorber (Photon Cross Section)", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2016/2017.

8- Dr. Elham J. Mohammad, Muntadhar Mohammad Azeez, "Optics of Gaussian Beams and Digital Resonator Using MATLAB", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2017/2018.

9- Dr. Elham J. Mohammad, Ghafran Mohammed Abd, "Leukemia Diagnosis Using MATLAB R2018a", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2018/2019.

تطوير المهارات

- Workshops.   Conferences.   Certifications.

Workshops:

ت	عنوان الندوة او الورشة او الحلقة الدراسية	الجهة التي اقامتها	تاريخ الانعقاد	نوع المشاركة
1	التشهير والابتزاز الالكتروني مؤشر خطير على تغيّر القيم وظاهرة غذتها التكنولوجيا والتراجع الأخلاقي	شعبة التعليم المستمر/كلية العلوم/الجامعة المستنصرية	2016/12/5	القاء محاضرة
2	التشهير والابتزاز الالكتروني	كلية التربية/ الجامعة المستنصرية	2016/12/14	القاء محاضرة
3	دور الأستاذ الجامعي في تنمية مهارات التفكير والابداع لدى الطلاب ورفع مستوى أداء الجامعة	شعبة التعليم المستمر/كلية العلوم/الجامعة المستنصرية	2017/10/11-10	القاء محاضرة
4	الزي الموحد المحتشم ظاهرة حضارية ووسيلة للانضباط لرفع مستوى مجتمع الاقتصاد المعرفي وإذابة الفوارق الاجتماعية	شعبة التعليم المستمر/كلية العلوم/الجامعة المستنصرية	2018/1/2	القاء محاضرة
5	دور الألعاب الإلكترونية (الحرب الناعمة) في هدم قيم المجتمع وحقيقة كابوس لعبة مريم الشيطانية	شعبة التعليم المستمر/كلية العلوم/الجامعة المستنصرية	2018/3/18	القاء محاضرة
6	علاقة الأستاذ والطالب، أزمة ثقة قد تطيح بالتعليم وسط جهل لإستراتيجيات الانتماء والأحكام القضائية في رحاب الجامعات العراقية	شعبة التعليم المستمر/كلية العلوم/الجامعة المستنصرية	2018/3/20	القاء محاضرة
7	المخدرات واثرها في هدم قيم المجتع	شعبة التعليم المستمر/كلية العلوم/الجامعة المستنصرية	2018/11/13	القاء محاضرة
8	التصنيف العالمي ومتطلبات الحصول عليه في الجامعات العراقية	كلية الهندسة/الجامعة المستنصرية	2014/3/6	ترشيح وتوصيات
9	ورشة عمل: كيفية اعداد ادلة الجودة	مركز التعليم المستمر/ الجامعة التكنولوجيا	2014/3/6-2	ترشيح

القاء محاضرة	2019/3/10	شعبة التعليم المستمر/كلية العلوم/الجامعة المستنصرية	النظرية النسبية لالبرت اينشتاين	10

Conferences:

1- Elham Jasim Mohammad, "The Inhibitory Effect of Silver Nanoparticles on Some especially Bacteria Microorganisms, Pesudomonas Aeruginosa, Esherichia Coli and Staphylococcus Aureus", 2nd International Conference on Materials Engineering & Science (IConMEAS), (2019).

2- Elham Jasim Mohammad, "Image Processing of SEM Image Nano Silver Using Kmeans MATLAB Technique", The 1st International Conference on Safety and Security of the Scientific Applications (ICSSSA), (2018).

3- Elham Jasim Mohammad, "Fabrication of NiO_{NPs}/PSi for Gas Sensor Application Prepared by Chemical Method", Meeting on Nanotechnology: Principles and Application: Malaysia, (2018).

4- Elham Jasim Mohammad, "Study the Acousto-Optic Spatial Filters Diffracted Light at Zeroth-Order Using MATLAB", IOP Conference Series: Materials Science and Engineering: Turkey, (2018).

5- Elham Jasim Mohammad, "Theoretical Study Acousto-Optic Spatial Filters at Zeroth-Order Diffracted Light Using MATLAB", Conf. 21th College of Education Al-Mustansiriyah, (2015).

6- Elham Jasim Mohammad and Gaillan H. Abdullah, "Analytic Design of Dielectric Multilayer Thin Films Chirped Mirrors", Conf. 6th International on Resent Advance and Space Technologies RAST2011, IEEE, Turkey, (2013).

7- Elham Jasim Mohammad and Gaillan H. Abdullah, "Theoretical Design of Double Chirped Mirrors for Dispersion Compensation of Femtosecond Laser Pulses", Conf. 20th College of Education Al-Mustansiriyah, (2013).

8- Elham Jasim Mohammad, "Design and Study of Dielectric Double Chirped Mirrors in Ultra Short Femtosecond Pulse Lasers", Conf. 5th International on Resent Advance and Space Technologies RAST2011, IEEE, Page 608-611, Turkey, (2011).

9- Elham Jasim Mohammad, "Design Study on Dielectric Bragg Mirror", Conf. 18th College of Education Al-Mustansiriyah, (2011).

10- Elham Jasim Mohammad, "Design of Dielectric Bragg Mirror Consisting Quarter-Wave Stacks Using Transfer-Matrix Method", Conf. 7th College of Science Al-Mustansiriyah, (2011).

Certifications:

1- شهادة الIC3 وبدرجة دولية.
2- شهادة التوفل.
3- شهادة LATEX.
4- شهادة إعداد أدلة ضمان الجودة 2013/2014 الجامعة التكنولوجيا.
5- شهادة تطبيق معالج النصوص الوورد 2010.
6- شهادة الأجهزة المختبرية (تشغيلها وصيانتها) 2016.

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Curriculum Vitae

Elham Jasim Mohammad

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PERSONAL SUMMARY:

Dr. Elham Jasim Mohammad, working as Assistant Professor in the Department of Physics/ College of Science/ Mustansiriyah University, she obtained a Ph.D. in the field of Optoelectronics from Department of Physics/ College of Science/ Mustansiriyah University, the MSc. in Image Processing from Department of Physics/ College of Science/ Mustansiriyah University and the bachelor in Physics Science from Department of Physics/ College of Science/ Mustansiriyah University. She was among the top ten on the department and was appointed as a lecturer in the same department.

EDUCATION:

Ph. D.   **Optoelectronics**
Title   Theoretical Design of Double Chirped Mirrors for Dispersion Compensation of Femtosecond Laser Pulses and Dispersion Measurements
MSc.   **Image Processing**
Title   Digital Filters for Speckle Noise Reduction
Bachelor   **Physics Science**

ACADEMIC HONORS AND AWARDS:

1. Contributing to local conferences during 2011-2019 and obtaining many local certificates.
2. Contributing to foreign conferences during 2011-2019 and obtaining more than one international certificates.
3. Obtaining the honor of Science Day 2011.
4. Get more than 25 letters of thanks (Prime Minister - His Excellency Minister - President of the Mustansiriyah University - Dean of the Colage of Science - Head of the Department of Physics - Turkish Air Force).
5. Obtaining more than 20 local certificates.
6. Obtain 5 foreign certificates.
7. Obtaining the certificate of continuing education center/ preparation of quality assurance guides 2013/2014 University of Technology.
8. Obtaining the IC3 certificate with an international degree.
9. Obtaining the TOEFL certificate.
10. Obtaining LATEX certificate.
11. Certificate of participation in the application of word processor Word 2010.
12. Certificate of participation in the course of laboratory equipment (operation and maintenance) 2016.
13. Other certificates that cannot be mentioned here.

ACADEMIC /TEACHING EXPERIENCE:

1. Demonstrator in Nuclear Laboratory/ Department of Physical Sciences/ College of Science/ Mustansiriyah University.
2. Demonstrator in the Electronic Laboratory/ Department of Physical Sciences/ College of Science/ Mustansiriyah University.

3. Assistant Lecturer in Computer Lab/ Physics Science Department/ College of Science/ Mustansiriyah University. Subjects taught:
   - NUMERICAL ANALYSIS.
   - BASIC
   - VISUAL BASIC
   - MATLAB
4. Lecturer in the Department of Physics/ College of Science/ Mustansiriyah University and was teaching OPTICS for the third stage.
5. Lecturer in the Department of Physics/ Faculty of Science/ Mustansiriyah University and was teaching MATLAB for the third stage.
6. Assistant Professor in the Department of Physics/ College of Science/ Mustansiriyah University MATLAB and was teaching MATLAB for the third stage.

COURSES TAUGHT:

Undergraduate	Graduate
NUMERICAL ANALYSIS BASIC VISUAL BASIC MATLAB OPTICS	

PROFESSIONAL AFFILIATIONS:

1. Member of Nanotechnology Society 2012/2013.
2. Chairman of the Quality Assurance Committee/ College of Science/ Mustansiriyah University 2013/2014.
3. Chairman of the Committee for the preparation of the manual of the Department of Physics/ College of Science/ Mustansiriyah University 2013/2014.
4. Member of the Social Committee Department of Physics/ College of Science/ Mustansiriyah University 2013/2014.
5. Member of Curriculum Development Committee, Department of Physics, College of Science, Mustansiriyah University, 2013/2014.
6. Member of the Committee for the preparation of self-evaluation report College of Science/ University of Mustansiriyah 2014/2015.
7. Chairman of the Committee for the preparation of a guide College of Science/ Mustansiriyah University 2014/2015.
8. Member of the Committee on student absences 2016/2017.
9. Member of the Committee on Research Activities and Productions 2016/2017.
10. Chairman of the Committee on the graduate students Seminar 2016/2017.
11. Member of the Committee to discuss the doctoral thesis 2017.
12. Member of the Committee to discuss the Master Thesis 2018.
13. Member of the Continuing Education Committee 2018/2019.
14. Member of the Ministerial Committee to develop questions for applicants for recruitment 2018/2019.
15. Member of the Committee to prepare a comprehensive guide for the College of Science 2019.

PUPLICATIONS:

Papers with IF

Country	Journal title	IF	Research Title	
Indian	International journal of electrical engineering and technology (IJEET)	5.5028	Fabry –Perot Interferometer Picoseconds Dispersive Properties	1
Indian	International journal of advanced research in engineering and technology (IJARET)	5.8376	Analyzing Numerically Study the Effect of Add a Spacer Layer in Gires-Tournois Interferometer Design	2
Japan	Asian Journal of Natural and Applied Sciences	1.042	Theoretical Design TE-Polarization One-dimensional photonic crystal	3
USA	International journal of scientific and engineering research	1.4	IIR Butterworth Low-High Pass Optical Filters Design	4
Indian	International journal of industrial engineering research and development (IJIERD)	5.1283	Soliton Optical Fibers Supercontinuum Generation Near the Zero Dispersion	5
Indian	International journal of industrial engineering & technology (IJIET)	4.3857	Numerical Design TEM-Polarization One-Dimensional Photonic (1DMDP) Crystal	6
Indian	International journal of application or innovation in engineering and management (IJAIEM)	2.379	Design Study Sobel Edge Detection	7
Japan	International journal of engineering trends and technology(IJETT)	4.33	Design Optimize Interference Dielectric Edge Filter	8
Indian	International Journal of Innovative Research in Science, Engineering and Technology	5.422	Study Sobel Edge Detection Effect on the Image Edges Using MATLAB	9
Indian	International Journal of Physics and Research	2.3529	TEM-Polarization 2D-Photonic Crystal Design Using Fourier Expansion In Complex Quantum Hilbert Space	10

Publications
Conference Papers

1- Elham Jasim Mohammad, "The Inhibitory Effect of Silver Nanoparticles on Some especially Bacteria Microorganisms, Pesudomonas Aeruginosa, Esherichia Coli and Staphylococcus Aureus", 2nd International Conference on Materials Engineering & Science (IConMEAS), (2019).

2- Elham Jasim Mohammad, "Image Processing of SEM Image Nano Silver Using Kmeans MATLAB Technique", The 1st International Conference on Safety and Security of the Scientific Applications (ICSSSA), (2018).

3- Elham Jasim Mohammad, "Fabrication of NiO_{NPs}/PSi for Gas Sensor Application Prepared by Chemical Method", Meeting on Nanotechnology: Principles and Application: Malaysia, (2018).

4- Elham Jasim Mohammad, "Study the Acousto-Optic Spatial Filters Diffracted Light at Zeroth-Order Using MATLAB", IOP Conference Series: Materials Science and Engineering: Turkey, (2018).

5- Elham Jasim Mohammad, "Theoretical Study Acousto-Optic Spatial Filters at Zeroth-Order Diffracted Light Using MATLAB", Conf. 21th College of Education Al-Mustansiriyah, (2015).

6- Elham Jasim Mohammad and Gaillan H. Abdullah, "Analytic Design of Dielectric Multilayer Thin Films Chirped Mirrors", Conf. 6th International on Resent Advance and Space Technologies RAST2011, IEEE, Turkey, (2013).

7- Elham Jasim Mohammad and Gaillan H. Abdullah, "Theoretical Design of Double Chirped Mirrors for Dispersion Compensation of Femtosecond Laser Pulses", Conf. 20th College of Education Al-Mustansiriyah, (2013).

8- Elham Jasim Mohammad, "Design and Study of Dielectric Double Chirped Mirrors in Ultra Short Femtosecond Pulse Lasers", Conf. 5th International on Resent Advance and Space Technologies RAST2011, IEEE, Page 608-611, Turkey, (2011).

9- Elham Jasim Mohammad, "Design Study on Dielectric Bragg Mirror", Conf. 18th College of Education Al-Mustansiriyah, (2011).

10- Elham Jasim Mohammad, "Design of Dielectric Bragg Mirror Consisting Quarter-Wave Stacks Using Transfer-Matrix Method", Conf. 7th College of Science Al-Mustansiriyah, (2011).

Journal Papers

	Research Title	Journal title	Date	Country
1	Study the Acousto-Optic Spatial Filters Diffracted Light at Zeroth-Order Using MATLAB	Materials Science and Engineering	2018	Turkey
2	Image Processing of SEM Image Nano Silver Using Kmeans MATLAB Technique	Al-Mustansiriyah Journal of Science	2018	Iraq
3	Fabrication of NiO_{NPs}/PSi for Gas Sensor Application Prepared by Chemical Method	Meeting on Nanotechnology: Principles and Application	2018	Malaysia
4	Deformation and Electronic Extortion Serious Indicator of Changing the Moral, Phenomenon Support by Technology and Moral Retreat	Ishraqat Development Magazine is a refereed scientific journal issued by the Development Center for Studies and Training	2017	Iraq
5	Silicon Photon Absorber (Photon Cross Section)	International Journal of Science and Engineering Investigations	2017	France
6	Silicon Photon Cross Section Using Logarithmic Scale	International Journal of Science and Engineering Investigations	2017	France
7	Effects of Thin Film Multilayers Thickness and Refractive Index on Narrowband Filters Transmission's	Al-Bahir Journal of Natural and Engineering Sciences	2016	Iraq
8	Design Study Dielectric (TiO_2/SiO_2) Heat Reflecting Cold Mirrors	Al-Mustansiriyah Journal of Science	2016	Iraq
9	TEM-Polarization 2D-Photonic Crystal Design Using Fourier Expansion In Complex Quantum Hilbert Space	International Journal of Physics and Research	2015	Indian
10	Theoretical Design for Dielectric Chirped Mirrors	Journal of College of Education	2015	Iraq
11	Theoretical Study Acousto-Optic Spatial Filters at Zeroth-Order Diffracted Light Using MATLAB	Conf. 21 College of Education Al-Mustansiriyah	2015	Iraq

12	Study Sobel Edge Detection Effect on the Image Edges Using MATLAB	International Journal of Innovative Research in Science, Engineering and Technology	2014	Indian
13	Design Study Sobel Edge Detection	International journal of application or innovation in engineering and management (IJAIEM)	2014	Indian
14	Design Optimize Interference Dielectric Edge Filter	International journal of engineering trends and technology(IJETT)	2014	Japan
15	Theoretical Design TE-Polarization One-dimensional photonic crystal	Asian Journal of Natural and Applied Sciences	2013	Japan
16	IIR Butterworth Low-High Pass Optical Filters Design	International journal of scientific and engineering research	2013	USA
17	Fabry–Perot Interferometer Picoseconds Dispersive Properties	International journal of electrical engineering and technology (IJEET)	2013	Indian
18	Analyzing Numerically Study the Effect of Add a Spacer Layer in Gires-Tournois Interferometer Design	International journal of advanced research in engineering and technology (IJARET)	2013	India
19	Soliton Optical Fibers Supercontinuum Generation Near the Zero Dispersion	International journal of industrial engineering research and development (IJIERD)	2013	India
20	Numerical Design TEM-Polarization One-Dimensional Photonic (1DMDP) Crystal	International journal of industrial engineering & technology (IJIET)	2013	Indian
21	TM-Polarization One-Dimensional Photonic Crystal Design	International Journal of Advances in Applied Sciences	2013	Malaysia
22	Design and Analysis Superprism Effects In 1D Photonics Crystal	International Journal of Physics and Applications (IJPA)	2013	Indian
23	Design and Analysis Narrowband Filters	International Journal of Photonic (IJP)	2013	Indian
24	Theoretical Design of Picoseconds Fabry–Pérot Filter and Study the Dispersion Using Coupled Mode Equation	International Journal of Physics and Applications (IJPA)	2013	Indian
25	Analytic Design of Dielectric Multilayer Thin Films Chirped Mirrors	Conf. 6th International on Resent Advance & Space Technologies RAST2013	2013	Turkey
26	Theoretical Design of Double Chirped Mirrors for Dispersion Compensation of Femtosecond Laser Pulses	Conf. 20th College of Education Al-Mustansiriyah	2013	Iraq
27	Multilayer Thin Films Dielectric Double Chirped Mirrors Design	International Journal of Physics and Applications	2012	Indian
28	Double Chirped Mirrors and Chirped Law Synthesis	International Journal of Physics and Applications (IJPA)	2012	Indian
29	Statistical Simulation Methods	International Journal of Physics and Applications	2012	Indian
30	Study the Design of Dielectric Chirped Mirror	Al-Mustansiriyah Journal of Science	2012	Iraq
31	Image Shearing Operating Algorithm in Still Image Processing	Al-Mustansiriyah Journal of Science	2012	Iraq
32	Effect of Geometric Rotation Operating on Still Image Quality	Al-Mustansiriyah Journal of Science	2012	Iraq

33	Theoretical Design for Double Chirped Mirrors in Femtosecond Pulse Lasers	International Journal of Physics and Applications (IJPA)	2011	Indian
34	Design and Study of Dielectric Double Chirped Mirrors in Ultra Short Femtosecond Pulse Lasers	Conf. 5th International on Resent Advance and Space Technologies RAST2011	2011	Turkey
35	Design Study on Dielectric Bragg Mirror	Conf. 18th College of Education Al-Mustansiriyah	2011	Iraq
36	Design of Dielectric Bragg Mirror Consisting Quarter-Wave Stacks Using Transfer-Matrix Method	Conf. 7th College of Science Al-Mustansiriyah	2011	Iraq
37	Speckle Noise Reduction in SAR Images Using Non-Adaptive Mode-Filter	Journal of College of Education	2009	Iraq
38	Advanced Edge Detection: Canny Edge Detection Filter	Journal of College of Education	2009	Iraq
39	Embedding Data in JPEG Images	Journal of College of Education	2009	Iraq
40	Applied Algorithm of Image Geometric Shearing Operating on Still Images	Journal of College of Education	2009	Iraq
41	Algorithm of Image Rotation Operating That Using in Still Image	Journal of College of Education	2009	Iraq
42	General Properties and Statistics Distribution for Speckly Images	Journal of College of Education	2009	Iraq
43	Recognition of SAR Images Using Pattern Classification Method	Journal of College of Education	2009	Iraq
44	Statistical Concepts for Speckle Noise	Al-Mustansiriyah Journal of Science	2008	Iraq
45	Statistical Concepts for Speckle Noise	Journal of College of Education	2008	Iraq
46	Adaptive Noise Filtering For Magnitude MR Data And Some Statistical About MR Imaging	Iraqi Company for Data Technology	2008	Iraq
47	Segmentation of SAR Images Using Thresholding Techniques	Al-Basra University Jornal	2008	Iraq
48	Messages Hiding Technique in Digital Images	Iraqi Company for Data Technology	2008	Iraq
49	Adaptive Edge Detection Method Using Circular Sliding Mask	Iraqi Company for Data Technology	2008	Iraq
50	Study Coherent Noise Simulation Methods	Journal of College of Education	2008	Iraq
51	Adaptive SAR Image Smoothing Using Gamma-Filter	Journal of College of Education	2008	Iraq
52	Adaptive Contrast-Enhancement Magnetic Resonance Images	Al-Mustansiriyah Journal of Science	2008	Iraq
53	Segmentation of SAR Images Using Edge-Detector Method	Al-Mustansiriyah Journal of Science	2008	Iraq
54	Speckle Noise Reduction Using Non-Adaptive Filters	Al-Mustansiriyah Journal of Science	2002	Iraq

Supervising graduation projects

1- Dr. Elham J. Mohammad, Yasser Abd Al-Kalak Mohammed Wdaa, "Design Study Sobel Edge Detection Processing Using MATLAB " A Project Submitted to the Department of Physics, College of Science,

University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, Unitive Number: 2010 508 2 183, 2013/2014.

2- Dr. Elham J. Mohammad, Abbas Hiway Rhai Al-Shimary, "Design Study Acousto-Optic Spatial Filtering At Zeroth-Order Diffracted Light Using MATLAB", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2013/2014.

3- د. الهام جاسم محمد, يوسف سعد عباس, "المفاعلات النووية", مشروع تخرج مقدم الى كلية العلوم الجامعة المستنصرية كجزء من متطلبات نيل درجة البكلوريوس في علوم الفيزياء, 2015/2014.

4- د. الهام جاسم محمد, مهدي خنجر بدن, "تفاعل الجسيمات المشحونة مع المادة", مشروع تخرج مقدم الى كلية العلوم الجامعة المستنصرية كجزء من متطلبات نيل درجة البكلوريوس في علوم الفيزياء, 2015/2014.

5- Dr. Elham J. Mohammad, Wasan Satar Jbar, "Simulation Physics with MATLAB to Design Electric Motor", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, Unitive Number: 2012 508 2 074, 2015/2016.

6- Dr. Elham J. Mohammad, Wurood Basim Mohammed, "Simulation Physics with MATLAB to Design Electric Motor", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, Unitive Number: 2012 508 2 003, 2015/2016.

7- Dr. Elham J. Mohammad, Ruba Saad Hazem, "Silicon Photon Absorber (Photon Cross Section)", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2016/2017.

8- Dr. Elham J. Mohammad, Muntadhar Mohammad Azeez, "Optics of Gaussian Beams and Digital Resonator Using MATLAB", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2017/2018.

9- Dr. Elham J. Mohammad, Ghafran Mohammed Abd, "Leukemia Diagnosis Using MATLAB R2018a", A Project Submitted to the Department of Physics, College of Science, University of Mustansiriyah in Partial Fulfillment of the Requirement for the Graduated Degree in Physics Science, 2018/2019.

PROFESSIONAL DEVELOPMENT:

Workshops:

	Title	The authority that set up it	Date	Type of participation
1	Electronic defamation and extortion are a serious indicator of changing values, a phenomenon fueled by technology and moral decline	Continuing Education Division/ College of Science/ Mustansiriyah University	2016/12/5	giving a lecture
2	Defamation and electronic blackmail	College of Education/ Mustansiriyah University	2016/12/14	giving a lecture
3	The role of the university professor in developing students' thinking and	Continuing Education Division/ College of	2017/10/11-10	giving a lecture

	creativity skills and raising the level of university performance	Science/ Mustansiriyah University		
4	Moderate uniforms are a cultural phenomenon and a means of discipline to raise the level of knowledge economy society and dissolve social differences	Continuing Education Division/ College of Science/ Mustansiriyah University	2018/1/2	giving a lecture
5	The role of electronic games (soft war) in the demolition of the values of society and the reality of the game nightmare of the demonic Mary	Continuing Education Division/ College of Science/ Mustansiriyah University	2018/3/18	giving a lecture
6	Professor and student relationship, a crisis of confidence may overthrow education amid ignorance of the strategies of belonging and judicial rulings in the Iraqi universities	Continuing Education Division/ College of Science/ Mustansiriyah University	2018/3/20	giving a lecture
7	Drugs and their impact on the destruction of community values	Continuing Education Division/ College of Science/ Mustansiriyah University	2018/11/13	giving a lecture
8	International rankings and requirements for obtaining it in Iraqi universities	College of Engineering/ Mustansiriyah University	2014/3/6	Nomination and recommendations
9	How to prepare quality guides	Continuing Education Center/ University of Technology	2014/3/6-2	Nomination
10	The Relativity Theory of Albert Einstein	Continuing Education Division/ College of Science/ Mustansiriyah University	2019/3/10	giving a lecture

Conferences:

1- Elham Jasim Mohammad, "The Inhibitory Effect of Silver Nanoparticles on Some especially Bacteria Microorganisms, Pesudomonas Aeruginosa, Esherichia Coli and Staphylococcus Aureus", 2nd International Conference on Materials Engineering & Science (IConMEAS), (2019).

2- Elham Jasim Mohammad, "Image Processing of SEM Image Nano Silver Using Kmeans MATLAB Technique", The 1st International Conference on Safety and Security of the Scientific Applications (ICSSSA), (2018).

3- Elham Jasim Mohammad, "Fabrication of NiO_{NPs}/PSi for Gas Sensor Application Prepared by Chemical Method", Meeting on Nanotechnology: Principles and Application: Malaysia, (2018).

4- Elham Jasim Mohammad, "Study the Acousto-Optic Spatial Filters Diffracted Light at Zeroth-Order Using MATLAB", IOP Conference Series: Materials Science and Engineering: Turkey, (2018).

5- Elham Jasim Mohammad, "Theoretical Study Acousto-Optic Spatial Filters at Zeroth-Order Diffracted Light Using MATLAB", Conf. 21th College of Education Al-Mustansiriyah, (2015).

6- Elham Jasim Mohammad and Gaillan H. Abdullah, "Analytic Design of Dielectric Multilayer Thin Films Chirped Mirrors", Conf. 6th International on Resent Advance and Space Technologies RAST2011, IEEE, Turkey, (2013).

7- Elham Jasim Mohammad and Gaillan H. Abdullah, "Theoretical Design of Double Chirped Mirrors for Dispersion Compensation of Femtosecond Laser Pulses", Conf. 20th College of Education Al-Mustansiriyah, (2013).

8- Elham Jasim Mohammad, "Design and Study of Dielectric Double Chirped Mirrors in Ultra Short Femtosecond Pulse Lasers", Conf. 5th International on Resent Advance and Space Technologies RAST2011, IEEE, Page 608-611, Turkey, (2011).

9- Elham Jasim Mohammad, "Design Study on Dielectric Bragg Mirror", Conf. 18th College of Education Al-Mustansiriyah, (2011).

10- Elham Jasim Mohammad, "Design of Dielectric Bragg Mirror Consisting Quarter-Wave Stacks Using Transfer-Matrix Method", Conf. 7th College of Science Al-Mustansiriyah, (2011).

Certifications:

1. Obtaining the IC3 certificate with an international degree.
2. Obtaining the TOEFL certificate.
3. Obtaining LATEX certificate.
4. Certificate of participation in the application of word processor Word 2010.
5. Certificate of participation in the course of laboratory equipment (operation and maintenance) 2016.