

**Fourth-year students at the College of Education for Pure Sciences
and supervisors of (BSc) graduation projects for the academic year
2020-2021- Morning studies**

Student's Name	Supervisor Name	Project's Name	No.
+ Duha Mohammed .1 Najla Yousif Hajer + Shahed Ayad .2 Mahmood	Dr. Hamid Salih	1-The use of nano-thin films as solar cells. 2- Study of the properties of nano-thin films as gas sensors.	1
Sefana +Noor Kheder.1 Munthir Samir + Sarah Salih.2 Mohammed	Dr. Saeed Nayef	1-Study the effect of nano-grain size on the dielectric constant and the concentration of charge carriers for some types of coatings within the near infrared spectral area. 2-Study the impact of nano-granular size on the energy and energy gap 3-Activation of some types of paints within the near infrared spectral area.	2
Yaqeen +Haneen Noori .1 Muhsin + Mustafa Thair .2 Marwan Ubaid	Dr. Waleed Bideewi	1- Use of plant leaf residues in polyester support. 2- Use pistachio peel residues to support polyester. 3- Use plant fiber residues to support polyester.	3
Mohammed Fessal Amir Khamees+	Dr. Ali Khalaf	1-Determining dynamic symmetry and calculating nuclear energy levels of some calcium nucleus isotopes.	4
+ Aymen Kheder .1 Mustafa Munaf + Uthman Ali .2 Muhammed Abd Alsettar	Dr. Jasim Mohammed	1-Thin films technology in the field of solid state electronics development. 2-Nanotechnology and some of its applications.	5
+Hajir Jawher.1 Mohammed Khalid Wail + Omer Ferej.2 Khalid	Dr.Sadi Khalaf	1-Modern applications of lasers in medicine. 2-Nanotechnology and its modern 2 applications.	6
+ Ahmed Khaleel .1 Almurtedha Issa Ali + Siddeeq Nhid.2 Mohammed	Dr.Waleed Subhi	1-Study of nuclear composition using the cluster model. 2-nuclear radiation activity - its benefits and dangers.	7
Abulrezaq Abdulbasit .1 Alaa Adil+ + Hadeer Haikel .2 Yaqeen Hameed + Ayman Talib .3 Abdullah Muamin	Fareed Mushab	1- study the physical properties of the 2- Study the .dwarf planet (Iris) formation and evolution of the solar system. 3- Study of the physical properties of Mars moons.	8

+ Hiba Abdhameed.1 Sarah Settar + Marwah Majeed .2 Rewa'a Ali Haleh +Fatimah Jelal .3 Salih	Dr. Selam Khalaf	1-photo-detectors: the principle of work - their properties - their types. 2- Optical resonator: work - designs - calculating the stability. 3- Laser applications in the industry.	9
Noor + Noor Jelal .1 Shehab Sefa + Alia'a Niamah .2 AbdiQadir Suray + Ahmed Tareq .3 Abdulmuttalib	Dr. Jemal Fadhil	1-Study the electrical conductivity of transparent semiconductor oxides. 2-Improving the physical properties of nanostructure zinc oxide. Electrical properties of heterojunction in solar cells.	10
Abdelrezaq1- Mustefa + Mohammed Tareq	Dr. Mazin Hamid	1- Study the optical properties of tin oxide films doped with antimony. 2- Study the electrical properties of tin oxide films doped with antimony. 3- Study the structure properties of tin .3 oxide films doped with antimony.	11
+ Abdelrezaq Ratib .1 Omer Mohammed Ali +Salih Jubair .2 Sulaiman	Dr. Adi subhi	1- Steel making and its characteristics. 2- Developments in Bainite ultra-strong .and stainless steel	12
+Fatimah Abd Alrehman Aya Selam	Dr. Mustefa Zuain	1-Study the properties of semiconductor nanoscale compositions in the solar cell manufacturing.	13
+Rendeh Hamdy .1 Amani Ali + Shereen Mohammed .2 Aysha Azzam	Omar Abd Al- azeez	1- Greenhouse gases and their impact on . the atmosphere. 2- Electromagnetic radiation and its impact on humans (communications and the Internet).	14
Tariq +Ali Khaleefa .1 Ziad Dalay + Aseel Zidan.2 Abid	Dr. Anmar Dhira	1- Heavy elements. 2- High-purity Germanium detector	15
Rusul + Israa Ayad .1 Saad Mustefa Abd .2 Ali Yaseen +Amunim	Dr. Mahir Noori	1- Organic solar cells. 2- perovskites Solar cells	16
Rebab Telab	Marwa Abd Al- Kareem	Study of surface solidity of SiO ₂ /UPE composite.	17
Omer +Ahmed Sameer .1 Imad +Shayma'a Abid .2 Neb'a awad	Dr.Omar Muhaidy	1- Design an electronic circuit to operate the radio with alternative power sources. 2- Manufacture of single-layer films of silver nanoparticles using spin coater technology.	18
.1 + Omar Mahmood.2 Mohammed Jebar	Rewa'a Isam	1- Study of super conductivity in materials and their applications. 2- Study the impact of nuclear radiation	19

		on the human body and how to avoid it.	
Neda Abd + Rehab Salih Alsemed	Dr.Bilal Kemal	1- Study the vibrational properties of Aluminum Phosphate using density function theory.	20

**Fourth-year students at the College of Education for Pure Sciences
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2020-2021- Evening studies**

اسماء الطلاب	الاستاذ المشرف	عنوان البحث	ت
Sareh Lateef Ferah Reyad	Dr. Hamid Salih	Study of the properties of nanolayers in solar cell applications	1
Melak Abd Al- Lateef Abd Alrehman Hatim	Dr. Saeed Nayef	Study the physical properties of smart titanium nickel alloys and their uses	2
Gufran Mwaffeq Muhammed Imad	Dr. Ali Khalaf	Calculating nuclear and transitional energy levels of some of sodium nucleus isotops.	3
Ruaa Mohammed Semar Hamid	Dr.Sadi Khalaf	Study of the properties of transparent metal oxides in electro-optics applications.	4
Seja Yehya Ziad Tariq	Dr. Jasim Mohammed	Electricity generation from Solar power.	5
Hutham Kareem Omar Rehman	Dr. Waleed Bideewi	Study of environmentally friendly composite materials	6
نور جبير الاء سالم	Dr.Bilal Kemal	Study of the electronic characteristics of the energy gap in direct and indirect transitions of aluminum arsenic	7
Muhammed Shakir Abd Alhadi Fakhree	Dr. Selam Khalaf	Gas lasers - their properties and types	8
Seher Selam Sefa Sead	Dr. Mustefa Zuain	Study of transparent conductive oxides (TCOs) and their applications in solar cells	9
Zaid Usama Abdullah Selah	Dr. Mazin Hamid	Smart Plumber	10
Qasim Mohammeh Bilal Ferhan	Dr.Omar Muhaidy	manufacture methods of electronic chips.	11
Ruqaya Isam Sena'a Shehab	Dr. Adi subhi	Developments in polymer and its modern applications	12
Mohammed Khdair Anes Haroon	Dr. Ibaraheem Qays	Laser applications in communications	13
Ahmeed Kareem	Selah Shihab	Study the effect of the structural and optical	14

Hassen Felah

properties of CdO nano-films prepared by using thermal chemical degradation.

