**OBJECTIVE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Seeking a fulfilling work experience with a reputed institute that operates in a meritocratic environment, encourages progressive research, and will allow me to utilize my education, skills and experience effectively to contribute towards its success.

**EDUCATION\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* ***Imperial College London U.K******(1992)***

Ph.D Physics (Laser Spectroscopy)

**Thesis**: f-Value Measurements for Sr, Mg, and Cd to High Rydberg Members by Pulsed Laser

Based Magneto-Optical Spectroscopy

* ***Queen Mary College University of London U.K. (1988)***

MS. Nuclear Engineering

* ***Gomal University Dera Ismail Khan, Pakistan***  ***(1978)***

MSc Physics

**PROFESSIONAL EXPERIENCES\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* ***King Saud University KSA (Sept 2009-Present)***

Professor of Physics at College of Science

Teaching Laser Physics, General Physics, Nuclear Physics and Modern Physics to undergraduates.

Teaching Atomic & Molecular Physics, Lasers & their applications and Laser material interaction to Postgraduates.

**Research Projects:**

Two projects of NPST( 2 million SR grant for each) have been approved.

1. Highly Efficient Quantum Dots Sensitized Solar Cells (QDSSCs) Based on Nano-Metal Oxide Semiconductors. (Running)
2. Fabrication and characterization of thermoelectric nanocomposite materials for sustainable energy technologies. (Grant awaited)

* ***Pakistan Institute of Laser and Optics (PILO) (1992-2009)***

Head (Chief Scientific Officer)

* Set up Laser Material Processing facilities and supervised following activities:
* Laser cutting, welding, heat treatment with different materials using 50W to 2.5KW CO2 lasers.
* Laser marking and engraving with Nd:YAG / CO2 lasers
* Scoring of Ceramic with Nd:YAG laser.
* Generation of nano-particles of Sm/ Co using lasers
* Etching of quartz in micron range. Wet etching of quartz with excimer laser.
* Set up laboratory for laser spectroscopy equipped with Excimer pumped dye laser, atomic beam chamber, thermionic diode and data acquisition system. Performed multi-photon excitation and ionisation experiments.
* Design, development and fabrication of laser systems. 200 W slow flow CW CO2 and 2mJ Pulsed Nitrogen lasers.
* Excellent background in the development of vacuum systems for various applications.
* ***COMSATS University, Islamabad (2006-2009)***

Visiting Professor, Physics Department

Taught Laser Physics and its applications to postgraduates.

* ***Alama Iqbal Open University Islamabad (2006-2009)***

Visiting Professor Physics Department

Taught Laser Physics and its applications to postgraduates.

* ***Army Public College of Management and Sciences (2001-2009)***

Professor Physics Department

Taught Physics to undergraduate students of Electrical Engineering, Software Engineering and Telecom Engineering.

**HONORS & AWARDS\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Awarded postdoctoral fellowship by **Beckman Institute of lasers University of California U.S.A** in **2001**.
* Awarded ***Tamgha-e-Baqa*** by president of Pakistan for recognition of hard work and best performance in **1998**.
* Awarded **Science and Technology scholarship** for higher education in advanced countries in **1985**.
* Awarded **Merit scholarship during postgraduate studies** in **1977**.
* I have been selected to receive **funding support for supervision of Ph.D**. level students under the scholarship programmes of the **Ministry of Science and Technology.**

**OTHER RELEVANT EXPERIENCES\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* **Thesis Examined:**
* Ph.D Thesis Quaid-i-Azam University Islamabad Pakistan. Title: *Laser Spectroscopic Studies of Bound and Autoionizing Spectra of Tin.* By Ali Nadeem
* M.Phil Thesis Quaid-i-Azam University Islamabad Pakistan. By Muhammad Rafiq.
* MS Thesis Pakistan Institute of Engineering & Applied Sciences(PIEAS) Islamabad Pakistan. Title: *Laser/IR based Remote Surveillance System.* By Nasim Ullah
* M.Phil Thesis Allama Iqbal Open University Islamabad Pakistan. Title: *Laser Indused Breakdown Spectroscopy Of Optical Crystals*. By Muhammad Gulfam Mazhar.
* Ph.D Thesis Quaid-i-Azam University Islamabad Pakistan. Title: Studies on the Ultra Cold Rubidium Rydberg Atoms.

*(4 MS thesis examined in King Saud university)*

* **External Examiner for MSc, M.Phil and Ph.D:**
* Quaid-i-Azam University Islamabad, Pakistan
* Gomal University Dera Ismail Khan, Pakistan
* Pakistan Institute of Engineering & Applied Sciences(PIEAS) Islamabad, Pakistan.
* Alama Iqbal Open University (AOU) Islamabad, Pakistan.
* Federal Urdu University Islamabad, Pakistan
* 4 MS thesis examined in King Saud University Saudi Arabia.
* **Thesis Supervised:**
  + **8 MS thesis supervised in King Saud University.**
* **Courses Taught**
* Phys-145 -general Physics for medical students- undergraduates
* Phys-104 - general Physics for computer engineering students - undergraduates
* Phys-103 - general Physics for engineering students - undergraduates
* Phys-335- Laser and Applications- undergraduates
* Phys-435- Laser Physics – undergraduates
* Phys-331- Optics- undergraduates
* Phys-456- Atomic and molecular Spectroscopy - undergraduates
* Phys-536- Atomic and molecular Spectroscopy-graduate
* Phys-532- Advance Laser Physics- graduate
* Phys-633- Laser material interaction-Post graduate

**RESEARCH PUBLICATIONS\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Atomic f-value measurements of high rydberg members by pulsed laser based magneto-optical spectroscopy. J.P.Connerade, **W.A.Farooq**, H. Ma, M. Nawaz and N. Shen (1992) J.Phys. B: 25 1405
2. On anomalies in the high Rydberg spectrum of Sr.M.Nawaz, **W.A.Farooq**, J.P. Connerade (1992) J.Phys.B: 25 1147
3. Magneto-optical rotations in vacuum ultraviolet. **W.A.Farooq**, M.Nawaz, J.P. Connerade and J. P. Morangos (1992) J.Phys.B: 25 4141.
4. Magneto-optical spectroscopy of autoionizing resonance’s. P.Connerade, **W. A.** **Farooq** and Nawaz (1992) J.Phys B: 25 L181.
5. The influence of the Paschen-Back effect on magneto-optical rotation spectra. M. Nawaz, **W.A. Farooq**, J. P. Connerade (1992) J.Phys B: 25 3283.
6. Magneto-optical spectra of Lithium and Sodium. M. Nawaz, **W.A. Farooq**, J.P.Connerade (1992) J. Phys B: 25 5327.
7. Many-electron atoms in high magnetic fields J. P.Connerade, G. Droungas, R. Elliott, X He, N.Karapanagioti, W. A. Farooq, H. Ma, J. P. Marangos and M. Nawaz (1994) J Phys B: 27, 2753.
8. **W.A.Farooq**. “Laser: a super tool of the century” (1995) VISION COMSATS Vol 1, 52.
9. **W.A.Farooq.** “ Gas Lasers” (1996). VISION COMSATS Vol 4.
10. **W. A. Farooq**, K. Ahmed, A. Rashid, S. Shahdin & M. A. Atta; “Study of single and two photon ionization of resonance excitation of sodium atom”, Proceeding of 7th National Symposium on “Frontier in Physics” Quaid-i-Azam University, Islamabad (19-21 November 1998) pp-88-94 (2001).
11. **W. A. Farooq**, K. Ahmed, S. Shahdin & M. A. Atta; “*Some results on the Laser Ionisation based on resonance saturation (LIBORS) in sodium Vapour*”, 11th International School on Quantum Electronics (*Laser Physics and Application*), P. A. Atanasova and S. Cartalevam, Editors (18-22 September 2000, Varna, Bulgaria) Proceedings of SPIE Vol. 4397, pp221-225 (2001).
12. **W.A.Farooq.** “Research on the high rydberg states of Strontium by using narrow band dye laser” Chinese Journal of Laser APLS-2000 Vol B10.
13. **W.** **A. Farooq** Research on autoionization resonances of Barium in magnetic field using narrow band Dye Laser: “Proceedings of the ninth National Symposium on Frontiers in Physics” pp192-199 (2003).
14. W. A.Farooq*. “f-value measurement of high Rydberg members for Mg & Cd by pulsed laser based magneto-optical spectroscopy”.* (Summer school Nathiagali Pakistan, October 1994)
15. W.A.Farooq*. “Laser based magneto-optical spectroscopy in Ultraviolet”*. (PIP Annual Conference Lahore Pakistan, April 1993)
16. W.A.Farooq*. “probe measurements of laser plasma obtained at laser ablation by means of N2 laser from YBa2Cu3O7-x”.* (8th International School Varna Bulgaria, September 1994)
17. W.A Farooq. A. Hamdani, S.Shahdin “*Generation of 100W CO2(10.6 micron) laser*” (PIP Annual Conference Bahawalpur Pakistan, May 1995)
18. A.Hamdani. W. A. Farooq, S.Shahdin “ *Paramitric studies of a high pulse power Nitrogen laser*” (PIP Annual Conference Bahawalpur Pakistan, May 1995)
19. W.A.Farooq. “*Introduction to Laser Technology*” International Workshop on Laser and Industrial Applications 16th September 1995, Islamabad Pakistan
20. A.Rauf, A. Hussain, R. Akhterc, **W.A. Farooq** and M. Aslam  **“***Role of Combustion Energy in Laser Cutting of Austenitic Stainless Steel”* Key Engineering Materials Vol. 442 (2010) pp 81-87
21. R. Akhter , A. Hussain, **W.A. Farooq** and M. Aslam “*Laser Surface Hardening of GCr15 Bearing Steel Ring” Key* Engineering Materials Vol. 442 (2010) pp 130-136.
22. M.M. Ashrafa, A. Hussain, R. Akhter, **W.A. Farooq** and M. Aslam “*Estimation of the Hardness for Laser Surface Hardening of Plain Carbon Steel”* Key Engineering Materials Vol. 442 (2010) pp 164-171
23. A.H. Hamdani, W. Ahmed, A. Ansar, R. Akhter, **W.A. Farooq** and M. Aslam “*Parametric Study of Ablation Depths for Different Optical Glasses Using High Fluence Laser Induced Plasma Assisted Ablation (LIPAA)”* Key Engineering Materials Vol. 442 (2010) pp 172-177
24. A.Hussain, R. Akhter, **W.A. Farooq** and M. Aslam “*Laser**Surface Alloying of Ni-Co Electroplated Low Carbon Steel”* Key Engineering Materials Vol. 442 (2010) pp 137-143
25. A.A. Farag , B. Gunduz, Fahrettin Yakuphanoglu, **W. A. Farooq “** *Controlling of electrical characteristics of Al/p-Si Schottky diod by tris(8-hydroxyquinolinato) aluminium organic film***”** Synthetic Metals 160 (2010) 2559-2563.
26. Fahrettin Yakuphanoglu, **W. A. Farooq** “*Threshold voltage control of 2,3 benzanthracene organic thin-film transistors by visible light for integration of transistors into electronic circuits*” Synthetic Metals 161 (2011) 51-55.
27. Fahrettin Yakuphanoglu, **W. Aslam Farooq “** [*The effect of SiO2 dielectric layer on ultraviolet detecting properties of pentacene thin film transistor*](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6TY7-51NMYCP-3&_user=1454611&_coverDate=01%2F31%2F2011&_alid=1624592490&_rdoc=7&_fmt=high&_orig=search&_origin=search&_zone=rslt_list_item&_cdi=5611&_sort=d&_st=13&_docanchor=&view=c&_ct=27&_acct=C000052544&_version=1&_urlVersion=0&_userid=1454611&md5=6bc96735429d1b9c53978c4e1a8f8506&searchtype=a)” Synthetic Metals 161 (2011) 132-135.
28. Fahrettin Yakuphanoglu, **W. Asalm Farooq “***Flexible pentacene organic field-effect phototransistor”* Synthetic Metals. V-161, issue: 5-6, P 379-383, 2011
29. F. Yakuphanoglu, I.S. Yahia, B.F. Senkal, G.B. Sakr**, W. A. Farooq, “**Impedence Spectroscopy properties of Polypyrrole doped with boric acid” *Synthetic Metals*, *Volume 161, Issues 9-10*, *Pages 817-822, 2011*
30. Mehmet Enver Aydın , Murat Soylu , Fahrettin Yakuphanoglu , **W. A.Farooq**,“*Controlling of electronic parameters of GaAs Schottky diode by poly(3,4-ethylenedioxithiophene)-block-poly(ethylene glycol) organic interlayer*” Microelectronic Engineering, V-88, issue 6, P 867-871, 2011
31. I.S. Yahia, M.Fadel, G.B.Sakr, F.Yakuphanoglu, S.S.Shenouda, , **W. A.Farooq** “*Analysis of current–voltage characteristics of Al/p-ZnGa2Se4/n-Si nanocrystalline heterojunction diode”* Journal of Alloys and Compounds, V-509, issue 12, P 4414-4419, 2011
32. M. Soylu, F.Yakuphanoglu, **W. A Farooq**, “ [*The pinch-off effect and inhomogeneous barrier height analysis in Al/p-GaAs Schottky barrier diodes*](http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=2EF89K43fEC4d3GFLgp&page=1&doc=4&colname=WOS)”.  OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS   Volume: 5   Issue: 1-2   Pages: 135-142, 2011.
33. F Yakuphanoglu, **W. A Farooq**, “[*Electrical characterization of p-Si/fullerene-C-60 heterojunction photodiode*](http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=2EF89K43fEC4d3GFLgp&page=1&doc=5&colname=WOS)”,OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS   V- 5   Issue: 1-2   Pages: 153-156 , 2011
34. A. Ballestar, F. Yakuphanoglu, B.F Senkal, **W.A. Farooq**, “[*Electrical characterization with atomic force microscopy and low temperature transport properties of boric acid doped polyaniline with Fe3O4 nanopar composites*](http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=2EF89K43fEC4d3GFLgp&page=1&doc=6&colname=WOS)”OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS   V-5   Issue: 1-2   Pages: 177 181, 2011
35. F.Yakuphanoglu,B.F Senkal, **W.A. Farooq**, “[*Electrical conductivity and optical properties of a new synthesized poly(tetramethylene ethylene diamine) polymer organic semiconductor*](http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=2EF89K43fEC4d3GFLgp&page=1&doc=7&colname=WOS)”,  OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS   V-5   Issue: 1-2   Pages: 182-185, 2011
36. F.Yakuphanoglu, **W.A.Farooq**, “[*Electrical characterization of ITO/PEDOT-PSS/MEH-PPV:PCBM organic diode*](http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=2EF89K43fEC4d3GFLgp&page=1&doc=8&colname=WOS)” OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS   V- 5   Issue: 1-2   Pages: 186-190, 2011
37. I.S. Yahia, A.A .M. Farag, F. Yakuphanoglu, **W.A.Farooq** , “*Temperature dependence of electronics parameters of organic schottky diode based on fluorescein Sodium Salt*” Synthetic Metals, V-161,Issues 9-10,P 881-887
38. Fahrettin Yakuphanoglu, W. Aslam Farooq, “Organic*-inorganic photosensor controlled by frequency based on nanostructure 1,4-diaminoanthraquinone and p-silicon*” SYNTHETIC METALS   Volume: **161**   Issue: **3-4**   Pages: **324-329, (2011)**
39. A.A.M. Farag, , **W.A.Farooq** F. Yakuphanoglu *“*[**Characterization and performance of Schottky diode based on wide band gap semiconductor ZnO using a low-cost and simplified sol–gel spin coating technique**](http://www.sciencedirect.com/science/article/pii/S0167931711002759?_alid=1760988080&_rdoc=4&_fmt=high&_origin=search&_docanchor=&_ct=37&_zone=rslt_list_item&md5=be107ac337dccc131eb631b40c6b7f8b)”  *Microelectronic Engineering*, *Volume 88, Issue 9*, *September 2011*, *Pages 2894-2899*
40. F. Yakuphanoglu, Y.S. Ocak, T. Kıl.ıçoğlu, **W.A.*Farooq****“*[Interface control and photovoltaic properties of n-type silicon/metal junction by organic dye](http://www.sciencedirect.com/science/article/pii/S0167931711004539?_alid=1760988080&_rdoc=16&_fmt=high&_origin=search&_docanchor=&_ct=37&_zone=rslt_list_item&md5=9c778b1e868b9ecdad9fcd122225874a)” Microelectronic Engineering, Volume 88, Issue 9, September 2011, Pages 2951-2954
41. Fahrettin Yakuphanoglu,**W. Aslam Farooq**, “***[Photoresponse and electrical characterization of photodiode based nanofibers ZnO and Si](http://www.sciencedirect.com/science/article/pii/S136980011100059X?_alid=1760988080&_rdoc=32&_fmt=high&_origin=search&_docanchor=&_ct=37&_zone=rslt_list_item&md5=06a73bb6dd06f989b33f6230af6a47a6)***” *Materials Science in Semiconductor Processing*, ***In Press,***
42. Fahrettin Yakuphanoglu, **W. Aslam Farooq**, “[***Electronic and Photovoltaic Properties of p-Si/PCBM:MEH-PPV Organic-Inorganic Hybrid Photodiode”***](http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=R1AHl874m7mFlMjag9p&page=1&doc=1) PHYSICA POLONICA A  Volume: **119**   Issue: **6**   Pages: **890-894**   Published: **JUN 2011**
43. Armağan Günsel, Mehmet Kandaz, Fahrettin Yakuphanoglu, **W.A.Farooq**, “[Extraction of electronic parameters of organic diode fabricated with NIR absorbing functional manganase phthalocyanine organic semiconductor](http://www.sciencedirect.com/science/article/pii/S0379677911001408?_alid=1806654646&_rdoc=7&_fmt=high&_origin=search&_docanchor=&_ct=43&_zone=rslt_list_item&md5=fb64b49788451e3371816e9c29fe1820)” *Synthetic Metals*, *Volume 161, Issues 15-16*, *August 2011*, *Pages 1477-1482*
44. M.S. AlSalhi**\***, W.A.Farooq, M.R.Baig, A.H Al-Fareikh and S.S Al-Ghamdi, “ CO2 Laser Induced Micro structural Variation in alpha-irradiated Polyallydigycol Polymer” IEEE Saudi Arabia Sect. Book No. 978-1-4577-0068-2 (2011)
45. I. S. Yahia, M. Fadel, B, G, Sakr, W. A. Farooq, “ Impedance Spectroscopy of Nanostructure p-ZnGa(2)Se(4)/n-Si Hetrojunction Diode” PHYSICA POLONICA A  Volume: **120**   Issue: **3**   Pages: **563-566**   (2011)
46. F. Yakuphanoglu, M. Shah, W. A. Farooq, “ Elactrical and Interfacial Properties p-Si/P3HT Organic-on-Inorganic Junction Barrier” ACTA PHYSICA POLONICA A  Volume: **120**   Issue: **3**   Pages: **558-562**   (2011)
47. Soylu Murat; Yahia I. S.; Yakuphanoglu Fahrettin, W. A. Farooq, “Modification of electric properties of Al/p-Si Schottky barrier device based on 2 '-7'-dichlorofluorescein” Journal of Applied Physics, **110**, 7, DOI: **10.1063/1.3647507, (2011)**
48. A. A. M. Faraq, W. A. Farooq, F. Yakuphanoglu, “Characterization and performance of Schottky diode on wide band gap semiconductor ZnO using a low-cost and simple sol-gel spin coating technique” 88, 7, 2894-2899 (2011)
49. F . Yakuphanoglu, S. Y. Ocak, T. Kilicoglu, W. A. Farooq, “Interface control and photovoltaic properties of n-type silicon/metal junction by organic dye” MICROELECTRONIC ENGINEERING, **88**, 9, 2951-2954 (2011)
50. Murat Soylu, I. S. Yahia, Fahrettin Yakuphanoglu, and W. A. Farooq, “Modification of electrical properties of Al/p-Si Schottky barrier device based on 20-70 dichlorofluorescein” JOURNAL OF APPLIED PHYSICS 110, 074514 (2011)
51. W. A. Farooq, F. N. Al\_Mutairi, A. E. M. Khater, A. S. Al\_Dwayyan, M. S. AlSalhi, and M. Atif**, “**ELEMENTAL ANALYSIS OF FERTILIZER USING LASER INDUCED BREAKDOWN SPECTROSCOPY” *Optics and Spectroscopy, , Vol. 112, No. 6, pp. 874–880 (2012)*
52. Ravikumar Ramakrishnaiah, Wazirzada Aslam Farooq, Abdul-Aziz Abdullah Al Kheraif, Saad bin Qasim and Abdullah Saleh Aldwayyan*, “*Laser Induced Breakdown Spectroscopic Analysis of Dental Elastomeric Impression Materials**”** Middle-East Journal of Scientific Research 11 (8): 1003-1008, 2012
53. M. S. AlSalhi, A. S. Aldwayyan, A. H. M. Jasas, M. Atif, **W. Aslam Farooq**, “Spectroscopic analysis of dye-silica core-shell nanoparticles (DSCSNPs)” IEEE explore 2012. DOI: [10.1109/HONET.2012.6421459](http://dx.doi.org/10.1109/HONET.2012.6421459)
54. M. S. AlSalhi, A. S. Aldwayyan, A. H. M. Jasas, M. Atif, **W. Aslam Farooq**, “Study of the structural analysis of dye-silica core-shell nanoparticles (DSCSNPs)” IEEE explore 2012. DOI: [10.1109/HONET.2012.6421458](http://dx.doi.org/10.1109/HONET.2012.6421458)
55. **W. A. Farooq**, Amanullah Fatehmulla, K. Ocakoglu, F. Yakuphanoglu, “THE CHARGE TRANSPORT AND PHOTOCONDUCTION MECHANISMS OF TiO2-BASED DYE SENSITIZED SOLAR CELL” IEEE explore 2012. DOI: [10.1109/HONET.2012.6421439](http://dx.doi.org/10.1109/HONET.2012.6421439)
56. **W. A. Farooq**, Amanullah Fatehmulla, F. Yakuphanoglu, I.S. Yahia, “Synthesis and Electrical Characterization of Dyesensitized solar cell with Fluorescein Sodium Salt” IEEE explore 2012: DOI: [10.1109/HONET.2012.6421442](http://dx.doi.org/10.1109/HONET.2012.6421442)
57. M. R. Baig, M. S. Garawi, W. A. Farooq and F. Yakuphanoglu, “Study of Effects of Electron Irradiation on the Nano-Particles in Al-Zn Alloy by Small Angle Neutron Scattering” Middle-East Journal of Scientific Research, 12(8): 1143-1148, 2012
58. **W.A. Farooq**, M.R. Baig, A. Fatehmulla, M.S. Al-Salhi , S.S. Al-Ghamd and F. Yakuphanoglu, “Controlling of Optical Band Gap of Allyl Diglycol Carbonate Polymer with Ultraviolet Laser Radiation” ACTA PHYSICA POLONICA A Vol. 123 (2013)
59. M M Sarfraz, **W A Farooq**, Mohammad A Al-Eshaikh, Ahmed N, “Analysis of allyl di-glycol carbonate by laser induced breakdown spectroscopy” Laser Phys. 23 (2013) 055701 (8pp)
60. I.S. Yahia, H.Y. Zahran Amanullah Fatehmulla, W.A. Farooq, M. Aslam, S. MansoorAli, M. Atif,M.S. Abd El-sadek F. Yakuphanoglu,“Optical properties of nano-structured Pt/FTO counter electrode for QDSSCs” 978-1-4673-6195-8/13/$31.00 2013, IEEE Explore
61. Walid Tawfik, W Aslam Farooq and Zeyad A. Alahmed M M Sarfraz, K Ahmad,Fahrettin Yakuphanoglu,“Characterization and Analysis of Nanostructured CdO Thin Film using LIBS Technique” 978-1-4673-6195-8/13/$31.00 2013, IEEE Explore.
62. Syed Mansoor Ali, Syed Tajammul Hussain, Jan Muhammad, M.Ashraf, Aslam Farooq, M.Imran, Shahzad Abu Bakar, “Influence of magnesium doping on the structural and optical properties of tin (II) oxide thin films deposited by electron beam evaporation” Materials Science in Semiconductor Processing 16 (2013) 899–904
63. W. A. Farooq, F. N. Al-Mutairi, Z. Alahmed, “Analysis of Rocks around Capital of Kingdom of Saudi Arabia using Laser Induced Breakdown Spectroscopy**”**  Optics and Spectroscopy, 2013, Vol. 115, No. 2, pp. 241–248.
64. T. M. Al-Inad, Walid Tawfik, W. A. Farooq and A. S. Aldwayyan “LIP Characteristics of Nanostructured ZnO Thin Films” IEEE explore, 978-1-4799-2569-8/13/$31.00 ©2013 IEEE
65. W. Aslam Farooq, Syed Mansoor Ali, Jan Muhammad, Syed Danish Ali, Muhammad Hammad Aziz, Naeem-ur Rehman, Muhammad Hussain, “Synthesis and characterization of Sn1Mg12xO2 thin films fabricated by aero-sole assisted chemical vapor deposition” J Mater Sci: Mater Electron, v 24, 12, pp.5140-5146, 2013
66. W Aslam Farooq, Walid Tawfik, Fahad N. AL-Mutairi and Zeyad A. Alahmed “Qualitative analysis and plasma characteristics of soil from desert area using LIBS technique” Journal of the Optical Society of Korea, Vol. 17, No. 6, December 2013, pp. 548-558
67. W.A. Farooq, Walid Tawfik, A. Fatehmulla, S. M. Ali, M. Aslam “Laser irradiation effect on ZnO nanoparticles” 978-1-4799-0018-3/13/$31.00 ©2013 IEEEI explore
68. Walid Tawfik, W Aslam Farooq, and Z. A. Alahmed, “Damage Profile of HDPE Polymer using Laser-Induced Plasma” Journal of the Optical Society of Korea Vol. 18, No. 1, February 2014, pp. 50-54
69. Amanullah Fatehmulla, A.S. Al-Shammari, A.M. Al-Dhafiri1, W.A. Farooq, F.Yakuphanoglu “Electrical and optical properties of chlorine doped CdS thin films” World Applied Sciences Journal 31 (12): 2073-2078, 2014
70. A. Tataroğlu, H. Aydın, Ahmed A. Al-Ghamdi, Farid El-Tantawy, W. A. Farooq, F. Yakuphanogl, “Photoconducting properties of Cd0.4ZnO0.6/p-Si photodiodeby sol gel method” JOURNAL OF ELECTROCERAMICS , Volume: 32 Issue: 4 Pages: 369-375, 2014.( DOI 10.1007/s10832-014-9920-6).
71. Ilke Tasçıog˘lu, W.A. Farooq, Rasit Turan, Semsettin Altındal, Fahrettin Yakuphanoglu , “Charge transport mechanisms and density of interface traps in MnZnO/p-Si diodes”, Journal of Alloys and Compounds 590, 157-161- 2014
72. Nadia Abdel Aal, Ahmed A. Al-Ghamdi , Farid El-Tantawy, F. Yakuphanoglu , W. A. Farooq “Novel bulk synthesis of magnesium oxide nanobelts networks by microwave hydrothermal route” J Sol-Gel Sci Technol (2014) 70:14–18
73. Najma Zia, Fafhar-E-Alam, M.Atif, W. A. Farooq, M. H. Aziz, M. Hammad, A. Nadeem Afzal, N. A. Shad, Naveed Akhtar, Zia-Ul-Haq, M.R.Baig, “Designing of sophisticated automatic lead shielding to reduce radiation dose of Tc-99m” , JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALSVolume: 16 Issue: 3-4 Pages: 443-450, 2014
74. W. A. Farooq, S. Mansoor Ali, J. Muhammad, S. Danish Ali, and M. Atif, “STRUCTURAL CHANGES IN TIN OXIDE THIN FILM WITH LASER EXPOSURE” Optics and Spectroscopy 2014, том 116, № 3, с. 151–156
75. W. A. Farooq, M. Atif, Z. Shakoor. M. R. Baig, “Diagnostic of Brucellosis infection using fluorescence spectroscopy” OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS Volume: 8 Issue: 3-4 Pages: 334-337, 2014
76. M. R. BAIG, W. A. FAROOQ, SYED MANSOOR ALI, TALAL MOHAMMED ALRASHIDI, M. ATIF,S. S. AL-GHAMDI, M. S. ALGARAWI “Investigating the effects of Gamma exposure on the microstructural, optical and track properties of the Pre and Post alpha irradiated PM-355” JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Vol. 16, No. 5-6, May - June 2014, P. 712 - 718
77. W.A. Farooq, S. M. Ali, Walid Tawfik, Amanullah Fatehmulla, M. Aslam, A. S. Al-Dwayyan, M. S. AlSalhi, “Influence of Laser irradiation on nano-sized powder of Metal oxide” Russian Journal of Physical Chemistry A, 2014, Vol. 88, No. 13, pp. 2446–2450
78. W.A. Farooq, Amanullah Fatehmulla, F. Yakuphanoglu, I.S. Yahia , Syed Mansoor Ali, M. Atif, M. Aslam, Walid Tawfik, ““PHOTOVOLTAIC CHARACTERISTICS OF SOLAR CELLS BASED ON NANOSTRUCTURED TITANIUM DIOXIDE SENSITIZED WITH FLUORESCEIN SODIUM SALT” Theoretical and Experimental Chemistry, Vol. 50, No. 2, May, 2014
79. W A Farooq, W Tawfik, Z A Alahmed, K Ahmad and J P Singh, “ROLE OF PURGING GASES IN ANALYSIS OF POLYCARBONATE WITH LASER INDUCED BREAKDOWN SPECTROSCOPY” Journal of Russian Laser Research, Volume 35, Number 3, May, 2014
80. A. FATEHMULLA, M. ATIF, W. A. FAROOQ, M. ASLAM, F. YAKUPHANOGLU, I. S. YAHIA “Photovoltaic properties of ammoniated ruthenium oxychloride dye based solar cell” OPTOELECTRONICS AND ADVANCED MATERIALS – RAPID COMMUNICATIONS Vol. 8, No. 5-6, May - June 2014, p. 587 - 592
81. Amanullah Fatehmulla, W. A. Farooq, M. Aslam, M. Atif, S.M. Ali, I.S. Yahia, F. Yakuphanoglu and A. M. Al-Dhafiri, “PHOTOVOLTAIC AND IMPEDANCE CHARACTERISTICS OF MODIFIED SILAR GROWN CDS QUANTUM DOT SENSITIZED SOLAR CELL” Journal of International Scientific Publications: Materials, Methods and Technologies Volume 8, 2014. (ISSN 1314-7269)
82. M. FAKHAR-E-ALAM, M. A. ASGHAR, U. NAZAR, S. JAVED, Z. IQBAL, M. ATIF, S. MANSOOR ALI, W. ASLAM FAROOQ “CHARACTERIZATION OF ZINC OXIDE (ZnO) THIN FILM COATED BY THERMAL EVAPORATION TECHNIQUE” Journal of Optoelectronics and Biomedical Materials Vol. 6, Issue 2, April - June 2014, p. 35 – 40
83. Kaleem Ahmad, Walid Tawfik, Wazirzada A. Farooq, Jagdish P. Singh, “Analysis of alumina-based titanium carbide composites by laser-induced breakdown spectroscopy” Appl. Phys. A, 2014, DOI 10.1007/s00339-014-8544-7
84. W.A. Farooq, Amanullah Fatehmulla, M. Aslam, M. Atif, S.A. Mansoor, F. Yakuphanoglu, I.S. Yahia “COMPARISON OF PHOTOVOLTAIC PARAMETERS OF CDSE QD AND SAFRANIN DYE BASED SOLAR CELL” Journal of International Scientific Publications: Materials, Methods and Technologies Volume 8, 2014. (ISSN 1314-7269)
85. W.A. FAROOQ, M. ATIF, A. FATEHMULLA, F. YAKUPHANOGLU, I.S. YAHIA, “IMPEDANCE SPECTROSCOPY AND TRANSPORT MECHANISMS OF TiO2-BASED DYE SENSITIZED SOLAR CELL” Journal of Ovonic Research Vol. 10, No.3, May - June 2014, p. 61 – 66
86. W. Aslam Farooq, M. Atif, Syed Mansoor Ali, Amanullah Fatehmulla, and M. Aslam,”Effects of 1064 nm Laser on the Structural and Optical Properties of Nanostructured TiO2Thin Film” Optics and Spectroscopy, 2014, Vol. 117, No. 3, pp. 386–391
87. A. Tataroglu, Al-Ghamdi, A. Ahmed, Omran Bin, Saad, W. A. Farooq, “Electrical and photoconducting properties of nanorod in based spinel compound/p-Si photodiode by sol-gel spin coating technique” JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY Volume: 71 Issue: 3 Pages: 421-427, 2014.
88. M. Soylu, H. Aydin, Ahmed A. Al-Ghamdi, W. A. Farooq, F. Yakuphanoglu, “Study of optical and electrical assessments of the quaternary MgZnSnO system containing different Mg content”, J Mater Sci: Mater Electron (2014) 25:4235–4245.
89. R.K. Gupta, Ahmed.A. Al-Ghamdi, F. El-Tantawy, W.A. Farooq, F. Yakuphanoglu “Novel photosensor based on carbon nitride thin films”, Volume 134, 1 November 2014, Pages 149–151.
90. W. Aslam Farooq, M. Atif, Walid. Tawfik, M. S. AlSalhi, M. Mansoor, Jagdish P. Singh, “Study of Laser-Induced Breakdown Spectroscopy for Discriminating different types of Bacteria”, Plasma Science and Technology, Vol.16, No.12, Dec. 2014
91. A. Elsayed, T.Fahmy, Farid El-Tantawy, W. A. Farooq, F. Yakuphanoglu, “Electrical and Photoresponse Properties of p-CuGaO2-on-p-Si/Al Photodiode” Journal of Nanoelectronics and Optoelectronics Vol. 9, 584–589, 2014
92. Amanullah Fatehmulla,W. A. Farooq, M. Aslam,M.Atif,Syed Mansoor Ali, I.S.Yahia, F. Yakuphanoglu, A. M. Al-Dhafiri, “Photovoltaic and Impedance Spectroscopic Investigation of MEH-PPV Blended CdS Quantum Dot Sensitized Solar Cell” Journal of Nanoelectronics and Optoelectronics Vol. 9, 706–712, 2014
93. I. A. Elsayed, T.Fahmy, Farid El-Tantawy, W. A. Farooq, F. Yakuphanoglu, “Nanostructure Conducting Oxide Based on Schottky Diode” Journal of Nanoelectronics and Optoelectronics Vol. 9, 698–705, 2014
94. R. K. Gupta, H. Tuncer, Ahmed A. Al-Ghamdi, S.Yol, Aysegul Dere, F. Yakuphanoglu, W. A. Farooq, “Novel Optical Sensor Based on Zinc Phthalocyanine” Journal of Nanoelectronics and Optoelectronics Vol. 9, 713–717, 2014
95. Syed Mansoor Ali, W. A. Farooq, Rabia Qindeel, ,M.R.Baig, M.A.Shar, S. S. Al-Ghamdi, M.S.AlGarawi, M.Atif “Influence of Gamma Irradiation on the Structural and Optical Properties of Nanostructured Magnesium Doped SnO Thin Films” Journal of Nanoelectronics and Optoelectronics Vol. 9, 648–651, 2014.
96. W. A. Farooq, Walid Tawfik, Saad bin Qasim, A. S. Aldwayyan, M. Atif, Kaleem Ahmad, M. S.Al-Salhi, “Qualitative analysis of dental nano-composite restorative material using Laser Induced Breakdown Spectroscopy and EDS analysis” IEEE explorer 2014.
97. W. A. Farooq, M. Soylu, F. M. Amanullah, I. S. Yahia and F. Yakuphanoglu, “Effects of Different TiO2Solution Compositions on Efficiency of Quantum Dot Solar Cell (QDSC) by Sol–Gel Method” Journal of Nanoelectronics and Optoelectronics Vol. 9, 2014
98. W. A. Farooq, Amanullah Fatehmulla, M. Aslam,M.Atif, Syed Mansoor Ali, F. Yakuphanoglu, I. S. Yahia, “Photovoltaic and Impedance Spectroscopic Analysis of CdSe Quantum Dot Solar Cell” Journal of Nanoelectronics and Optoelectronics Vol. 9, 675–678, 2014
99. M. R. Baig\*, W. A. Farooq\*, S. S AL-Shehri , M.S. AI-SaIhi, S.S. AI-ghamdi, M. S. Al Garawi, M. Atif,” Study of radiation induced variation in structural and Optical properties of Polyallyl diglycol carbonate Polymer”, 978-1-4799-6940-1/14/$31.00 ©2014 IEEE-Explore (978-1-4799-6940-1/14/$31.00 ©2014 IEEE).
100. M. Atif, W. A. Farooq, Amanullah Fatehmulla, M. Aslam, Syed Mansoor Ali, “Photovoltaic and Impedance Spectroscopy Study of Screen-Printed TiO2 Based CdS Quantum Dot Sensitized Solar Cells” Materials 2015, 8, 355-367; doi:10.3390/ma8010355
101. Fakhar-E-Alam, M. ; S. Kishwer ,Abbas, Najeeb; M. Atif, W.A.Farooq, “Anticancer effects of nanometallic oxides and their ligands with photosensitizers in osteosarcoma cells” Journal of Optoelectronics and Advanced Materials, Vol. 17, no 11-12, (2015), 1808-1815.
102. WALID TAWFIK, LEDA G. BOUSIAKOU, RABIA QINDEEL, W.A.FAROOQ, NORAH H. ALONIZAN, AMAL J. FATANI, “Trace analysis of heavy metals in groundwater samples using laser induced breakdown spectroscopy (LIBS)” OPTOELECTRONICS AND ADVANCED MATERIALS – RAPID COMMUNICATIONS Vol. 9, No. 1-2, January – February 2015, p. 185 – 192
103. M. Mohamed Aslam, Syed Mansoor Ali, Amanullah Fatehmulla, W.A. Farooq, M. Atif, A.M.Al-Dhafiri, Muhammad Ali Shar, “Growth and characterization of layer by layer CdS–ZnS QDs on dandelion like TiO2 microspheres for QDSSC application” Materials Science in Semiconductor Processing Volume 36, (2015), pp57–64.
104. Amanullah Fatehmulla, M. Aslam Manthrammel, W. A. Farooq, Syed Mansoor Ali, and M. Atif, “Photovoltaic and Impedance Properties of Hierarchical TiO2 Nanowire Based Quantum Dot Sensitized Solar Cell” Journal of Nanomaterials, Volume 2015 (2015), Article ID 358063, 9 pages
105. M. ATIF, W.A. FAROOQ, M.S. ABD EL SADEK, H.S. EL SHESHTAWY, I.S. YAHIA, “STUDY OF THE INTERACTION BETWEEN MERCAPTOACETIC ACID (MAA) CAPPED CdS QUANTUM DOTS WITH DENATURED BOVINE SERUM ALBUMIN (dBSA)” , Chalcogenide Letters, 12 ( 3), p. 91 – 97, 2015
106. SYED MANSOOR ALI, W.A. FAROOQ, M.R. BAIG, M.A. S HAR, M. A TIF, S.S. ALGHAMDI, M.S. A LGARAWI, NAEEM- UR-R EHMAN, M UHAMMAD HAMMAD AZIZ, “Structural and optical properties of pure and Ag doped ZnO thin films by sol gel spin coating technique” MATERIALS SCIENCE-POLAND 33(3), 2015, pp. 601-60.
107. Syed Mansoor Ali , M. Aslam, W. A. Farooq , Amanullah Fatehmulla, M. Atif , “Assembly of CdS quantum dots onto hierarchical TiO2 structure for quantum dots sensitized solar cell applications” Materials, Volume 9, Issue 5-6, May 2015, PP 2376-2386,
108. W. A. FAROOQ, K. G. RASOOL, Walid TAWFIK, A. S. ALDAWOOD, “Application of Laser Induced Breakdown Spectroscopy in Early Detection of Red Palm Weevil: (Rhynchophorus ferrugineus )Infestation in Date Palm” Plasma Science and Technology, Vol.17, No.11, Nov. 2015
109. W. Tawfik, W.A. farooq, F.N. al-Mutairi, Z.A. Alahmed, “Monitoring of Inorganic Elements in Desert Soil Using Laser-induced Breakdown Spectroscopy” Lasers in Eng., Vol. 32, pp. 129–140 -2015.
110. L. G. BOUSIAKOU, T. GANETSOS, R. QINDEEL, W. A. FAROOQ, A. FATEHMULLA, SYED MANSOOR ALI, “Characterization of multilayer TiO2/ZnΟ nanostructured thin films using Raman spectroscopy” OPTOELECTRONICS AND ADVANCED MATERIALS – RAPID COMMUNICATIONS Vol. 9, No. 5-6, p. 782 – 787 2015.
111. \*Rabia Qindeel, Leda G. Bousiakou, Walid Tawfik, W.A. Farooq, Norah H. Alonizan, Salwa Alsaleh and Dimitris Siachos, “Trace Element Analysis Using ICP-MS in the Shallow Aquifers of The Haier Region, Saudi Arabia”, Middle-East Journal of Scientific Research 23 (8): 1941-1948, 2015
112. R. Qindeel, N. Alonizan, M. R. Baig, W. A. Farooq, S. S. Al-Ghamdiand M. S. Al-Garawi “Study of Optical properties of Alpha and Nd:YAG Laser Irradiated Cellulose Nitrate Polymer”, Org. Opto-Elect. 1, No. 1, 17-24 (2015)
113. H. Aydin, A. Tatarog ˘lu, Ahmed A. Al-Ghamdi, F. Yakuphanoglu, Farid El-Tantawy, W.A. Farooq,”A novel type heterojunction photodiodes formed junctions of Au/LiZnSnO and LiZnSnO/p-Si in series”. Journal of Alloys and Compounds 625 (2015) 18–25.
114. Ahmed A. Al-Ghamdi, A. Dere, A. Tataro glu, Bilal Arif, F. Yakuphanoglu,Farid El-Tantawy, W.A. Farooq, “Composite metal oxide semiconductor based photodiodes for solarpanel tracking applications”, Journal of Alloys and Compounds 650 (2015) 692-699.
115. F. Yakuphanoglu, B. Gunduzc, Ahmed A. Al-Ghamdi, W.A. Farooq, Farid El-Tantawy, “Transparent ultraviolet photodiodes based conductivegallium-indium-oxide films/p-type silicon for solar panel tracking systems” Sensors and Actuators A 234 (2015) 212–222.
116. Muhammad Nadeem Shakoor, Muhammad Fakhar-e-Alam, Najeeb Abba,UzmaTariq, Nasir Amin, Muhammad Hammad Aziz, M.Atif, W. A. Farooq, “Photodynamic Effect of NiO in HepG2 Cellular Model” Journal of Nanoelectronics and Optoelectronics Vol. 11(3), pp. 339-342, 2016.
117. Syed Mansoor Ali, M. Aslam,W.A.Farooq, Amanullah Fatehmulla, M. Atif, and F. Yakuphanoglu, “Photovoltaic and Impedance Spectroscopy of CdS Quantum Dots Onto Nano Urchin TiO2 Structure for Quantum Dots Sensitized Solar Cell Applications”, Journal of Nanoelectronics and Optoelectronics Vol. 10, pp.363-367 , 2016.
118. W. A. Farooq, M. R. Baig, Syed Mansoor Ali, M. A. Shar, S. S. Al-Ghamdi, M. S. Al Garawi, and M. Atif, “Synthesis of Nano Particles on Polyallyl Diglycol Carbonate Polymer Surface with Alpha Radiation” J. Nanoelectron. Optoelectron. 11, 24-28 (2016)
119. W. A. Farooq, M. Al Saud, Z. A. Alahmed, “Structural and optical properties of laser irradiated nano structured Cadmium Oxide thin film synthesized by sol-gel spin coating method”, Optics and Spectroscopy, Vol. 120, No. 5, (2016), pp. 745–750.
120. Akbar Ali, Mukhtar Ahmad, Majid Niaz Akhtar, Saleem Farooq Shaukat,Ghulam Mustafab, M. Atif, W. A. Farooq, “Magnetic Nanoparticles (Fe3O4& Co3O4 and Their Applications in Urea Biosensing” Russian Journal of Applied Chemistry, Vol. 89, No. 4, pp. (2016), pp 517−534.
121. Cihat Aydin, Najla M. Khusayfan, Ahmed A. Al-Ghamdi, Farid El-Tantawy, W. A. Farooq, F. Yakuphanoglu, “Facile synthesis, electrical and optical properties of Cu-doped GaN nanorods by sol–gel technique” J Sol-Gel Sci Technol, 78(1), (2016), pp 68-75.
122. W. A. Farooq, L. R. AL-Otaibi, A. S. Al-Dwayyan, F. Yakuphanoglu, M, Atif, “Effect of laser exposure on structural and optical properties of CdO and Li doped Cdo nano structured thin film synthesized by sol get method” (accepted in JNO-2016).
123. W. A. Farooq, Salah Ud-Din Khan, Syed Mansoor Ali, M. Aslam, “Effect of gamma rays on nanostructured TiO2 thin film synthesized with sol gel method”, Journal of Optoelectronics and Advanced Materials, V 18, No 7, 727-731 (2016).
124. Elsayed Elgazzar, A. Tatarog˘lu, Ahmed A. Al-Ghamdi, Yusuf Al-Turki, W. A. Farooq, Farid El-Tantawy, F. Yakuphanoglu, “Thermal sensors based on delafossite film/p-silicon diode for low-temperature measurements” Appl. Phys. A , (2016) 122:617.
125. R.O. Ocaya, Ahmed Al-Ghamdi, F. El-Tantawy, W. A. Farooq, F. Yakuphanoglu, “Thermal sensor based zinc oxide diode for low temperature applications” Journal of Alloys and Compounds 674 (2016) 277-288
126. F. Yakuphanoglu, Kwadwo Mensah-Darkwa, Ahmed A. Al-Ghamdi, R.K. Gupta, W.A. Farooq, “Novel organic doped inorganic photosensors” Microelectronic Engineering 160 (2016) 27–33.
127. Mekki, A. Dere, Kwadwo Mensah-Darkwac, Ahmed Al-Ghamdi, R.K. Gupta,K. Harrabi, W.A. Farooq, Farid El-Tantawy, F. Yakuphanoglu, “Graphene controlled organic photodetectors” Synthetic Metals 217 (2016) 43–56.
128. M Atif, W A Farooq, Maqsood A Siddiqui and Abdulaziz A Al-Khedhairy, “Preliminary study of spectral features of normal and malignant cell cultures” Laser Physics, Volume 26, Number 4, 2016.
129. A. Alyamani, A. Tatarog˘lu, L. El Mir, Ahmed A. Al-Ghamdi, H. Dahman, W. A. Farooq, F. Yakuphanog˘lu, “Photoresponse and photocapacitor properties of Au/AZO/p-Si/Al diode with AZO film prepared by pulsed laser deposition (PLD) method” Appl. Phys. A (2016) 122:297.
130. M. Soylu, Ahmed A. Al-Ghamdi, W.A. Farooq, F. Yakuphanoglu, “Correlations for coumarin additive on the electrical and photocatalytic activity of TiO2 modified by thiourea” Micreoelectronics Engineering V 154, (2016), pp 26-37.
131. W. A. Farooq, M. Atif, F. Yakuphanoglu, Amanullah Fatehmulla “Fabrication and electrical characterization of CdS quantum dots base d solar cell” OPTOELECTRONICS AND ADVANCED MATERIALS – RAPID COMMUNICATIONS , Vol. 10, (2016), p. 154 – 158.
132. MUHAMMAD FAKHAR-E-ALAM, M. U. FAROOQ, NAJEEB ABBAS, SEEMAB IQBAL, NASIR AMIN,MUHAMMAD HAMMAD AZIZ, M. ATIF, W. A. FAROOQ, R. SULEMAN, S.S.Z. ZAIDI, “Pharmacokinetics and biodistribution of nickel oxide for liver cancer cure” JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Vol. 18, Iss. 3-4, (2016), p. 414-418.
133. Adem Tatarog˘lu, Ahmed A. Al-Ghamdi, Farid El-Tantawy, W. A. Farooq, F. Yakuphanog˘lu, “Analysis of interface states of FeO-Al2O3spinel composite film/p-Si diode by conductance technique” Appl. Phys. A, v 122(3), (2016), article No 220.
134. Amanullah Fatehmulla, M. Aslam,W. A. Farooq, Syed Mansoor Ali,M. Atif,A. M. AlDhafiri, and F. Yakuphanoglu, “INFLUENCE OF LASER EXPOSURE ON THE PHYSICAL PROPERTIES OF NANO V2O5FILMS GROWN BY THERMAL EVAPORATION” Theoretical and Experimental Chemistry, Vol. 51, No. 6, (2016), pp 375-379.
135. H. Aydın, C. Aydın, Ahmed A. Al-Ghamdi, W.A. Farooq, F. Yakuphanoglu, “Refractive index dispersion properties of Cr-doped ZnO thin films by sol–gel spin coating method” Optik V 127(4), (2016),pp 1879–1883.

Note: 4 papers on LIBS are in process

**Reviewer of the following journals**:

1. Journal of Alloys and Compounds
2. Journal of Inorganic Materials
3. Microelectronic Engineering
4. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy
5. Synthetic Metals
6. Silicon
7. Surface Review and Letters
8. Materials Science in Semiconductor Processing
9. Photodiagnosis and Photodynamic Therapy
10. Surface Review and Letters
11. Journal of Optoelectronics and Advanced Materials

**Conference presentations:**

* **Eighth International School On Quantum Electronics, Laser, Physics And Applications**

**29th September to 4th October 1994, Varna, Bulgaria.**

**Presentation:** *probe measurements of laser plasma obtained at laser ablation by means of N2 laser from YBa2Cu3O7-x*

* **The Second Asian Pacific Laser Symposium (APLS, 2000) August 21 to 24, 2000,Shanghai, China**.

**Presentation**: *Research on the high rydberg states of Strontium by using narrow band dye laser*

* **11th International School On Quantum Electronics, Laser, Physics And Applications**

**18th September to 22nd September 2000, Varna, Bulgaria**.

**Presentation**: *Some results on the Laser Ionisation based on resonance saturation (LIBORS) in sodium Vapour*

* **Saudi International Electronics, Communications and Photonics**Conference**Riyadh, Saudi Arabia**April**23rd - 26th 2011.  (**KACST)

**Presentation:** *CO2 laser induced micro structural variation in alpha-irradiated Polyallydigycol polymer*

* **3rd NASLIBS 2011:  July 18-20, 2011 in Clearwater Beach, FL, USA.**

**Presentation:** Analysis of Rocks around Capital of Kingdom of Saudi Arabia Using Laser Induced Breakdown Spectroscopy

* **International Laser Physics Workshop (LPHYS’ 12), 23-27 July 2012, Calgary, Canada**

**Presentation:** *Elemental Analysis of Alumina- TiC composite using Laser Induced Break down Spectroscopy*

* **7th International Conference On Laser Induced Breakdown Spectroscopy (LIBS 2012),**

**29 Sept- 4 Oct 2012, Luxor-Egypt**

**Presentation:** *Role of purging gases in analysis of polycarbonate with Laser Induced Breakdown Spectroscopy*

* **9th INTERNATIONAL CONFERENCE, (HONET-2012), 12-14 Dec 2012, Istanbul Turkey**

**Presentation:** *Synthesis and Electrical Characterization of Dye-sensitized solar cell with Fluorescein Sodium Salt: (*DOI: [10.1109/HONET.2012.6421442](http://dx.doi.org/10.1109/HONET.2012.6421442))

* **16th International Conference on Materials Methods and Technologies-11-15 June 2014 Elenite,**

**Bulgaria.**

**Presentation:** *Comparison of Photovoltaic Parmeters of CdSe QD and Safranin Dye based Solar cell*

**(http://www.scientific-publications.net/en/article/1000218/)**

* **NanoNG14, International Conference, 22-24 August 2014, Firat University Turkey.**

**Presentation:** *Photovoltaic and impedance spectroscopic analysis of CdSe Quantum dot solar cell.*

*(http://www.nanong2014.org/Dokumanlar/program.pdf)*

* **LIBS-2014, The 8th International conference on Laser Induced Breakdown Spectroscopy,**
  1. **September 2014 -Beijing China.**

**Presentation:** *Application of Laser Induced Breakdown Spectroscopy in early detection of red*

*palm weevil: (Rhynchophorus**ferrugineus) infestation in date palm*

* **2nd Annual Meeting of Atomic, Molecular and Optical Physics (AMOP), 31st March - 1st April**

**2015, Aljouf University, Aljouf, Saudi Arabia**

**Presentation:** *Fluorescence spectroscopy of Nanometallic Oxides and their Ligands in*

*Osteosarcoma Cells*

* **SCIX 2015: North American Society for Laser Induced Breakdown Spectroscopy.**

**27 Sept – 2 Oct 2015. Conventional centre Providence, RI, USA.**

**Presentation:** *Study of Plasma and Identification of hazardous elements in the polystyrene using Laser Induced Breakdown Spectroscopy*

* Fifth Saudi International Meeting on Frontiers of physics. 16-18 February 2016, Jazan University Saudi Arabia.

Presentation: *Synthesis and characterization of cadmium selenide quantum dots at different parameter using chemical method*

**Non-Peer Reviewed Presentations**

1. ***Application of lasers in material processing*– (Presented at King Khalid University Abha-Saudi Arabia)- 9- April-2014.**
2. ***Fabrication of axial flow CO2 laser for material processing*-( Presented at The Pakistan Institute of Physics Annual Conference, 22nd -24th April 1995, Bahawalpur Pakistan).**
3. ***Lasers and their industrial applications*- (Presented at International Workshop on Laser and Industrial Applications- 16th September 1995, Islamabad Pakistan).**
4. ***Measurement of oscillator strength using magneto-optical spectroscopy-* (Presented at 19th International Nathiagali Summer College on Physics and Contemporary Needs 23rd June to 4th October 1994 Nathiagali, Pakistan).**
5. ***Fabrication of Nitrogen laser* -( Presented at The Pakistan Institute of Physics Annual Conference 2-5th April 1993, Lahore Pakistan).**

**Conferences Attended (LOCAL):**

# The Pakistan Institute of Physics Annual Conference

# 2-5th April 1993, Lahore Pakistan.

# The Pakistan Institute of Physics Annual Conference

22nd -24th April 1995, Bahawalpur Pakistan.

* **19th International Nathiagali Summer College on Physics and Contemporary Needs**

23rd June to 4th October 1994 Nathiagali, Pakistan.

* **International Workshop on Laser and Industrial Applications**

16th September 1995, Islamabad Pakistan

* **22nd International Nathiagali Summer College on Physics and Contemporary Needs**

28th July to 9th August 1997 Islamabad Pakistan.

* **7th National Symposium on FROTIERS IN PHYSICS**

19- 21 November 1998, Islamabad Pakistan

* **24th International Nathiagali Summer College on Physics and Contemporary Needs,** 28th June to 10th July 1999, Murree Pakistan
* **Preparatory School On Biophotonics**

7-9th October, 2002, Department of Physics QAU Islamabad Pakistan

* **9th National Symposium on FROTIERS IN PHYSICS**

28-30 January 2003, Lahore Pakistan

* **29th International Nathiagali Summer College on Physics and Contemporary Needs,** 08th July to 10th July 2004, Nathiagali Pakistan
* **31st International Nathiagali Summer College on Physics and Contemporary Needs,** 20th July to 26th July 2006, Nathiagali Pakistan

Conferences attended (Abroad) :

* Eighth International School On Quantum Electronics, Laser, Physics And Applications

29th September to 4th October 1994, Varna, Bulgaria.

* High Power Lasers – Science And Engineering

NATO Advanced Study Institute, July 16 to 29-1995 Karlovy Vary, Czech Republic

* The Second Asian Pacific Laser Symposium (APLS, 2000)

August 21 to 24, 2000,Shanghai, China.

* 11th International School On Quantum Electronics, Laser, Physics And Applications

18th September to 22nd September 2000, Varna, Bulgaria.

* LIBS-King Fahad University Damam Kingdom of Saudi Arabia 2010
* Saudi International Electronics, Communications and Photonics Conference Riyadh, Saudi Arabia April 23rd - 26th 2011.  (KACST)
* 3rd NASLIBS 2011:  July 18-20, 2011 in Clearwater Beach, FL, USA.
* International Laser Physics Workshop (LPHYS’ 12), 23-27 July 2012, Calgary, Canada
* 7th International Conference On Laser Induced Breakdown Spectroscopy (LIBS 2012), 29 Sept- 4 Oct 2012, Luxor-Egypt
* 9th INTERNATIONAL CONFERENCE, (HONET-2012), 12-14 Dec 2012, Istanbul Turkey
* One day workshop on “The Role of PV in the future Electricity/Energy Market” 20th April 2013, King Abdullah City for Atomic and Renewable Energy (K A CARE), Riyadh Saudi Arabia.
* Saudi International Electronics, Communications and Photonics Conference  (IEEE) Riyadh, Saudi Arabia April 27rd - 30th 2013.  (KACST)
* 16th International Conference on Materials Methods and Technologies-11-15 June 2014 Elenite, Bulgaria.
* NanoNG14, International Conference, 22-24 August 2014, Firat University Turkey.
* LIBS-2014, The 8th International conference on Laser Induced Breakdown Spectroscopy, 8-12 September 2014 Beijing China.
* Workshop on “Environmental Applications of Nanotechnology” 29/3/2015, King Saud University Riyadh Saudi Arabia.
* 2nd Annual Meeting of Atomic, Molecular and Optical Physics (AMOP), 31st March - 1st April 2015, Aljouf University, Aljouf, Saudi Arabia
* The 3rd Saudi International Electronics, Communications and Photonics Conference 2015. 27th - 28th April, 2015, Riyadh Saudi Arabia.
* SCIX 2015: North American Society for Laser Induced Breakdown Spectroscopy. 27 Sept – 2 Oct 2015. Conventional centre Providence, RI, USA.
* The 2nd Saudi International Conference on Scientific Publication abs Exhibition. 11-12 Oct 2015. King Saud University Riyadh.
* Fifth Saudi International Meeting on Frontiers of physics. 16-18 February 2016, Jazan University Saudi Arabia.
* One day workshop on “Optics and Photonics” Feb 21st 2016 Riyadh KSA. AMOP Saudi Physical Society.

**Grants Received:**

1. 1. SR- **1,044,749.00-**IstOct2012 to 30 April 2015 -NPST- **Highly Efficient Quantum Dots Sensitized Solar Cell (QDSSCs) Based on Nano- Metal Oxide Semiconductors**. (Two million SR )
2. SR-**60000** - Sept 2014 to Sept 2015- Deanship of Scientific Research at King Saud University –**Laser Applications**-(150000 SR).
3. SR- **800000.00-**Ist June 2014 to 30th June 2016 -NPST- **Fabrication and characterization of thermoelectric nanocomposite materials for sustainable energy technologies**. (Two million SR)
4. SR-**150000** .- Sept 2013 to Sept 2014- Deanship of Scientific Research at King Saud University –Laser Applications

**Membership of Professional Societies**:

1. Pakistan Institute of Physics (PIP)

2. Pakistan Physical Society ( PPS)

3. Saudi Physical Society, Atomic, Molecular and Optical Physics (AMOP)

4. Pakistan Vacuum Society.

5. ASLIBS-China

6. Nanoscience and Nanotechnology for Next Generation (NANONG)-Turkey

**Other Professional Activities:**

**1.** Member of editorial board of “Organo Opto-Electronics, An International Journal, Natural Sciences Publishing”.

2. Referee for promotion of faculty member of Iman University Riyadh

3. Referee for promotion of faculty member of Tayyaba University Madina

4. Reviewed projects from many universities.

**REFEREES\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* **Prof. Dr. Jagdish. P. Singh**

Institute for Clean Energy Technology

Mississippi State University

205 Research Blvd

Starkville, MS 39759-7704. USA

Phone: 662-325-7375 (office)

Fax: 662-325-846

E.Mail: [singh@icet.msstate.edu](mailto:singh@icet.msstate.edu) and [jagdishpsingh@gmail.com](mailto:jagdishpsingh@gmail.com)

* **Prof. Dr. Yasin Akhtar Raja**

Center for Opoelectronics & Optical Communications

UNC Charlotte. USA

Office: 328 Grigg

Phone: (704) 687-8156

FAX: (704) 687-8197

Email: [raja@uncc.edu](mailto:raja@uncc.edu)

* **Prof. Dr. M.Aslam Baig**

Physics department, Quaid-I-Azam

University Islamabad PAKISTAN

e.mail: [Baig777@yahoo.com](mailto:Baig777@yahoo.com) Tel: +92-51-2278692

* **Prof. Dr Fahrettin Yakuphanoğlu**

Firat University, Faculty Of Arts and Sciences

Physics Department, 23169, ELAZIG

Turkey

Phone +090-424-2370000-3621  
Fax     +090-424-2330062  
http://www.ak-rentschler.chemie.uni-mainz.de/images/icons/mail.gif[Email](mailto:fyhanoglu@firat.edu.tr) [fyhanoglu@firat.edu.tr](mailto:fyhanoglu@firat.edu.tr), fyhan@hotmail.com

Mobile: +900533 7623815

Firat University, Faculty Of Arts and Sciences

Physics Department, 23169, ELAZIG

Turkey

Phone +090-424-2370000-3621  
Fax     +090-424-2330062  
http://www.ak-rentschler.chemie.uni-mainz.de/images/icons/mail.gif[Email](mailto:fyhanoglu@firat.edu.tr) [fyhanoglu@firat.edu.tr](mailto:fyhanoglu@firat.edu.tr), fyhan@hotmail.com

Mobile: +900533 7623815